

Region of origin or religion?

Understanding why immigrants from Muslim-majority countries are discriminated against in Western Europe

Claire L. Adida* David D. Laitin† Marie-Anne Valfort‡

February 17, 2014

Abstract

There is widespread evidence that immigrants from Muslim-majority countries are discriminated against in Western Europe, relative to immigrants from European Christian-majority countries. Yet, it is not clear whether this discrimination is based on religion (Muslim), region of origin (since the bulk of Muslim-majority countries are located in regions outside Europe), or both. Relying on European Social Survey data and an identification strategy that seeks to separate religion from region of origin, our findings indicate that religion rather than region of origin explains such discrimination.

Keywords: Discrimination, International migration, Islam, Europe.

JEL: F22, J71, Z12.

*University of California, San Diego. Department of Political Science. Social Sciences Building 301. 9500 Gilman Drive, #0521. La Jolla, CA 92093-0521. USA. E-mail: cadida@ucsd.edu.

†Stanford University. Department of Political Science. 100 Encina Hall. Stanford, CA 94305-6044. USA. E-mail: dlaitin@stanford.edu.

‡Corresponding author. Paris School of Economics - Paris 1 Panthéon Sorbonne University. 106-112, Boulevard de l'Hôpital. 75013 Paris. France. E-mail: marie-anne.valfort@univ-paris1.fr. Phone: 33(0)1 44 07 81 94.

1 Introduction

Many correspondence tests¹ have shown that immigrants from Muslim-majority countries² are discriminated against in Western European labor markets,³ relative to immigrants from European Christian-majority countries.⁴ For instance, MacIntosh and Smith (1974) and Firth (1981) show that immigrants of Pakistani origin are more discriminated against in the British labour market than are immigrants of Italian and French origin.⁵ More recently, Hainmueller and Hangartner (2013) have analyzed the outcomes of naturalization referenda in Switzerland. They find that rejection rates for applicants from Turkey (the sole Muslim-majority country of origin in their database) are substantially higher than those for applicants from European Christian-majority countries, holding constant all the applicant's observable characteristics.⁶

Yet, the source of discrimination against immigrants from Muslim-majority countries remains unclear. Does this discrimination capture discrimination against Muslims relative to Christians? Or, since the bulk⁷ of Muslim-majority countries are located outside Europe, does it capture instead discrimination against individuals from non-European countries relative to individuals from European countries? Understanding the source of discrimination against immigrants from Muslim-majority countries in Western Europe is a critical prerequisite to finding solutions to such discrimination. Our objective in this paper is to offer a first attempt toward meeting this prerequisite.

To unravel the confound as to whether the discrimination stems from region or religion,

¹See Riach and Rich (2002) and Riach and Rich (2004) for a comprehensive overview of the correspondence tests that have been conducted in Australia, Europe and North America since their introduction in the UK by Jowell and Prescott-Clarke (1970).

²Table 1 provides the list of the 47 Muslim-majority countries (i.e. countries where more than 50% of the population is Muslim) together with the share of Muslims in their population, as reported by the Pew Research Center (2011) for year 2010.

³There are 23 countries in the United Nations Western European and Others Group (WEOG) that are considered as Western European: Andorra, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, Norway, Portugal, San Marino, Spain, Sweden, Switzerland and the United Kingdom.

⁴According to the Pew Research Center (2011), there are 39 European Christian-majority countries: the 23 Western European countries presented in footnote 3, together with the following 16 countries: Belarus, Bulgaria, Cyprus, Czech Republic, Estonia, the former Yugoslavia, Georgia, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia and Ukraine.

⁵Booth, Leigh and Vargonova (2012) confirm these results in the Australian labour market. They show that immigrants of Middle-Eastern origin are more discriminated against than are immigrants of Italian origin.

⁶Such characteristics are: gender, age, education level, marital status, number of children, attractiveness, job skills, language skills, familiarity with Swiss habits and number of years spent in Switzerland.

⁷According to the Pew Research Center (2011), Albania is the only Muslim-majority country located in Europe.

we rely on the five rounds of the European Social Survey (ESS) collected between 2002 and 2010 in 17 Western European countries.⁸ These data allow us to study the discrimination faced by first- and second-generation immigrants in Western Europe. We proceed in four steps.

First, in order to gauge the external validity of the ESS data, we test whether, consistent with correspondence test results, Muslim immigrants from Muslim-majority countries are more discriminated against than Christian immigrants from European Christian-majority countries.

In a second step, we begin to address the confound as to whether religion or region of origin drives such discrimination. To isolate the religion component of discrimination against Muslim immigrants from Muslim-majority countries, one must hold their region of origin constant (i.e., stemming from Muslim-majority countries) and analyze how they would fare in Western Europe if they were Christian rather than Muslim. More precisely, the religion effect is measured by computing the difference in discrimination faced in Western Europe by Muslim immigrants from Muslim-majority countries and Christian immigrants from Muslim-majority countries. To isolate the region of origin component of discrimination against Muslim immigrants from Muslim-majority countries, one must hold their religion constant (being Muslim) and analyze how they would fare in Western Europe if they were European rather than non-European. More precisely, the region of origin effect is measured by computing the difference in discrimination faced in Western Europe by Muslim immigrants from Muslim-majority countries and Muslim immigrants from European Christian-majority countries.

Our results are consistent with the findings provided by correspondence tests. They show that Muslim immigrants from Muslim-majority countries are more discriminated against in Western Europe than are Christian immigrants from European Christian-majority countries. Moreover, we find that this difference is driven by religion (being Muslim), not by region of origin (stemming from countries that are mainly located outside Europe).

Yet, two potential biases cast doubt on the validity of these results. The first bias is induced by the migration history of immigrants. When we estimate the religion effect, religion is unlikely to be the sole distinguishing characteristic between Muslim and Christian immigrants from Muslim-majority countries. For example, Christian immigrants from Muslim-

⁸These countries are Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom. All countries referred to as “Western European” in footnote 3 are therefore included in our database, with the exception of Andorra, Iceland, Liechtenstein, Malta, Monaco and San Marino.

majority countries likely originate from a different region. This is the case of the *pieds noirs* in France, Judeo-Christian immigrants from Algeria who are descendants of French settlers.⁹ Similarly, when we estimate the region of origin effect, it is unlikely that Muslim immigrants from Muslim-majority countries and Muslim immigrants from European Christian-majority countries altogether differ according to their migration history. Some of the Muslim immigrants from European Christian-majority countries may in fact be descendants of immigrants from Muslim-majority countries who settled in Europe.¹⁰

The second bias is induced by the minority/majority status of immigrants in their country of origin. When we estimate the religion effect, Christian immigrants from Muslim-majority countries have minority status while Muslim immigrants from Muslim-majority countries do not. Similarly, when we estimate the region of origin effect, Muslim immigrants from European Christian-majority countries have minority status while Muslim immigrants from Muslim-majority countries do not. Yet, belonging to the minority (rather than to the majority) in one's country of origin is likely to impact one's cultural adaptation skills.¹¹ Therefore, minority/majority status, rather than religion or region of origin, can explain observed differences in the discrimination faced, in Western Europe, by the different groups of immigrants we focus on.

The third and fourth steps in our analysis therefore aim at better addressing these estimation issues for isolating the religion and the region of origin effects. To better estimate the religion effect, we focus in our third step on a country of origin where both Muslims and Christians have settled for equal periods of time, and where neither Muslim nor Christian constitutes a clear majority or minority, Bosnia and Herzegovina. Although located in Europe, Muslims have settled in Bosnia and Herzegovina since the Ottoman occupation of the Balkans from the 15th to the 19th century. Moreover, although it is, strictly speaking, a Christian-majority country, the share of Christians and Muslims is almost equal. According to the 2009 Report on International Religious Freedom by the US Department of State, 97% of the population in Bosnia and Herzegovina is either Christian or Muslim. Muslims stand for 46.5% of this population, while Christians account for 53.5%.

One could argue that the Bosnian war, which took place between 1992 and 1995 and

⁹Unfortunately, given that ESS data provide information on the place of birth of the respondent and her parents only, we cannot identify these descendants of Europeans who settled in Muslim-majority countries during the colonial period and therefore cannot exclude them from our analysis.

¹⁰Again, due to data limitation, we cannot exclude these individuals from our analysis.

¹¹This impact may be positive or negative. Belonging to the minority may sharpen one's adaptation skills by forcing one to adapt to the culture of the majority. But belonging to the minority may also undermine such skills by encouraging one to turn in on one's minority group (this tendency will be reinforced if the minority is discriminated against by the majority in the country of origin).

inflicted considerable suffering on Bosniaks (Bosnian Muslims), instilled among Bosniaks a “minority status”. This event may ultimately impact their integration into Western European host countries, and therefore the level of discrimination they face there. To rule out this possibility, we compare the discrimination faced in Western Europe by Muslim and Christian immigrants from Bosnia and Herzegovina who settled in Western Europe *before* the Bosnian war.¹²

Our fourth step allows us to better estimate the region-of-origin effect. It consists of comparing the discrimination faced in Western Europe by Muslim immigrants from the single Muslim-majority European country (Albania) and Muslim immigrants from non-European Muslim-majority countries. Such a comparison, which focuses only on Muslim-majority countries of origin, alleviates concerns that we are comparing populations that settled in their country of origin at vastly different times. Furthermore, it ensures a comparison of two populations that are similar in terms of majority/minority status in their country of origin: both groups indeed constitute the majority in their home countries.

Results from these third and fourth steps confirm our preliminary findings according to which religion rather than region of origin explains discrimination against Muslim immigrants from Muslim-majority countries. We indeed find that Muslim immigrants from Bosnia and Herzegovina who settled in Western Europe before the Bosnian war are more discriminated against than are their Christian counterparts. By contrast, we find no difference in the discrimination faced by Muslim immigrants from Muslim-majority countries located in or outside Europe. In the robustness checks, we elaborate on the lack of significance of the region of origin effect. We show that it is robust to considering Turkey as a European, rather than as a non-European, Muslim-majority country. Moreover, we demonstrate that this lack of significance is robust when we disentangle non-European Muslim-majority countries into sub-regions: Asia-Pacific, Middle-East North Africa and Sub-Saharan Africa. If Muslim immigrants from the various sub-regions in which Muslim-majority countries are located face similar discrimination, it is unlikely that the rooted populations in Western European countries condition their discriminatory behavior on characteristics that are specific to the region of origin of these immigrants.

To be sure, we do not claim that our third and fourth steps solve all the estimation problems inherent to an analysis that relies on observational survey data. The groups we

¹²Lebanon is another country of origin historically composed of an almost equal share of Muslims and Christians. However, the sample of Muslims and Christians of Lebanese origin that includes second-generation migrants and first-generation migrants who arrived in Western Europe before the Lebanese war (1975-1990) is too small (N=29) to allow us to compare their integration pattern.

compare may indeed differ according to characteristics other than religion or region of origin, which we do not observe. However, we believe that results that emerge in the second step and that are robust to the third and fourth steps of our analysis constitute a useful contribution to the under-studied though critical issue about whether religion or region of origin drives discrimination in Western Europe against Muslim immigrants from Muslim-majority countries.

The paper proceeds as follows. Section 2 surveys the literature on the nature of barriers to integration faced by Muslim immigrants from Muslim-majority countries in Western Europe. In Section 3, we introduce our survey data. Section 4 presents our results. Section 5 provides robustness checks. Section 6 discusses our conclusions and highlights avenues for future research.

2 Related literature

Previous research on the nature of barriers to integration faced by Muslim immigrants from Muslim-majority countries in Western Europe aims to isolate a religion effect. They test whether Muslims *qua* Muslims face greater hurdles than their non-Muslim counterparts.

Using the United Kingdom (UK) Fourth National Survey of Ethnic Minorities, Bisin, Pattachini, Verdier and Zenou (2008, 2011) find that attachment to the culture of origin¹³ is higher for Muslims than for non-Muslims. Moreover, this attachment attenuates with time spent in the UK for non-Muslims; but for Muslims, attachment is unrelated to such time.

Yet, these results are at odds with those of Manning and Roy (2010) who, using the UK Labour Force Survey in 2001, analyze respondents' probability of answering "British" when asked to define their identity. They show that newly arrived immigrants almost never think of themselves as British and that no difference exists between Muslims and non-Muslims. Moreover, they find that the probability of reporting a British identity increases with the time spent in the UK, at a similar rate for Muslims and for non-Muslims. The findings by Manning and Roy (2010) are in line with those provided by Constant, Gataullina and Zimmermann (2009) who, in the context of Germany, show no significant difference in the integration patterns of Christian and Muslim immigrants. Similarly Aleksynska (2011), relying on the European Social Survey, finds that civic participation is the same on average

¹³The attachment to the culture of origin is measured based on respondents' answers to three questions: (i) whether the individual considers as very important the role of religion in her life, (ii) whether the individual would have a problem with a close relative marrying a white person; and (iii) whether the desired proportion of one's ethnic group in the children's school is more than one half.

for Muslim and non-Muslim immigrants. Moreover, she shows that, even though integration is lower for newly arrived Muslims than for newly arrived non-Muslims, convergence between both groups is ensured after 20 years of residency.

These mixed results may partly derive from the difficulty of isolating a religion (Islam) effect on integration patterns, due to possible confounds such as race, ethnicity or nationality. Indeed, Muslim immigrants typically migrate from *Muslim* countries, i.e. countries with few non-Muslim counterparts. This is the case, for example, of North African immigrants in France, Turkish immigrants in Germany and Pakistani and Bangladeshi immigrants in the UK. These confounds make it difficult to obtain a clean comparison for any European state, holding constant the country of origin, between the integration patterns of Muslim and non-Muslim immigrants.

To limit such confounds and therefore obtain a clearer answer on whether religion has an impact on the integration of Muslim immigrants from Muslim-majority countries in Western Europe, Adida, Laitin and Valfort (2010) rely on a correspondence test in France. They compare the job-interview callback rates received by two French nationals of Senegalese background who differ only on religion. Their findings reveal a remarkable religious effect: the Muslim applicant is 2.5 times less likely to be contacted by the recruiter than is her Christian counterpart. Pierné (2013) confirms such results. He shows that a Muslim French national of North African background is 1.5 times less likely to be contacted by the recruiter than is her Christian counterpart.

We contribute to this effort to isolate the religious effect from potential confounds in three ways. First, contrary to previous survey-based analysis, we isolate the religious effect by focusing, in the third step of our analysis, on a country of origin, Bosnia and Herzegovina, that offers a balanced number of comparable Christian and Muslim immigrants.¹⁴ Second, we expand the external validity of the experimental evidence provided by Adida, Laitin and Valfort (2010) and by Pierné (2013) by showing that religion is a critical driver of discrimination against Muslims from Muslim-majority countries, not only in France but also in other Western European countries. Third, we do not restrict our attention to religion only. Rather, we estimate the relative contributions of religion and region of origin in explaining discrimination against Muslims from Muslim-majority countries.

¹⁴In our sample, among the 153 immigrants from Bosnia Herzegovina, 73 are Christians and 80 are Muslims.

3 Data

In this section, we introduce our sample. We then present the dependent variables and controls that enter our estimations.

3.1 Sample

The ESS data contain information on the country of birth of the respondent, as well as on the country of birth of the respondent’s parents.¹⁵ These data therefore allow us to focus on first- and second-generation migrants in Western European countries. We define a first-generation migrant as someone who was not born in the Western European host country where the interview is conducted, but who now lives in this country. Moreover, we call a second-generation migrant someone born in the Western European host country where the interview is conducted, with at least one parent born abroad.

Our analysis relies on a sample of Christian and Muslim immigrants from European Christian-majority countries and of Christian and Muslim immigrants from Muslim-majority countries.¹⁶ The question that allows us to infer the religious affiliation of the respondent reads as follows: “Which particular religion or denomination do you consider yourself as belonging to?” Respondents can choose between eight options: “Roman Catholic”, “Protestant”, “Eastern Orthodox”, “Other Christian denomination”, “Jewish”, “Islam”, “Eastern religions” and “Other non-Christian religions”. We define as Christian, respondents who answer “Roman Catholic”, “Protestant”, “Eastern Orthodox” or “Other Christian denomination” and as Muslim those who answer “Islam”. Individuals who describe themselves as Christian or Muslim constitute the quasi totality (95%) of individuals surveyed by the ESS who report a religious affiliation.

Table 2 summarizes the religion, region of origin and generation of immigrants in our sample. This sample is composed of 9,549 individuals: 6,970 (73%) Christian and Muslim immigrants from European Christian-majority countries and 2,579 (27%) Christian and Muslim immigrants from Muslim-majority countries. The proportion of Muslims varies from 4.5% (N=311) among Christian and Muslim immigrants from European Christian-majority

¹⁵The country of birth of the respondent is available in all five rounds of the ESS, while the country of birth of the parents is available only in rounds 2, 3, 4 and 5. We therefore cannot rely on round 1 when we focus on second-generation migrants.

¹⁶Since they constitute ambiguous cases, we do not include in our analysis second-generation migrants with one parent born in European Christian-majority countries and the other parent born in Muslim-majority countries. Nor do we include second-generation migrants whose parents stem from Muslim-majority countries located in different regions (Asia-Pacific, Europe, Middle East-North Africa and Sub-Saharan Africa). As expected such individuals constitute only a small minority of our sample (N=58).

countries to 61% (N=1,567) among Christian and Muslim immigrants from Muslim-majority countries.

We draw three lessons from Table 2. First, there is a surprisingly high proportion (39%) of Christians among Christian and Muslim immigrants from Muslim-majority countries. This finding suggests that religion is likely to be one of many characteristics distinguishing Muslim and Christian immigrants from Muslim-majority countries. Many of the Christian immigrants from these countries are presumably Europeans (or their descendants) who settled there since the colonial period. For instance, Christians in France who report that at least one of their parents was born in Algeria are likely to be descendants of *pieds noirs*, that is of French citizens who lived in French Algeria before independence. Second, the former Yugoslavia provides the bulk (85%) of Muslim immigrants from European Christian-majority countries: of the 311 Muslim immigrants who originate from European Christian-majority countries, 265 come from the former Yugoslavia.¹⁷ Note that, among these 265 Muslims of Yugoslavian origin, 80 stem from Bosnia and Herzegovina, our country of interest in the third step of our analysis. Also consistent with expectations, we observe that the bulk (94%) of Muslim immigrants from Muslim-majority countries stem from countries outside Europe: 45% stem from Asia-Pacific, 6% from Europe (Albania), 43% from Middle East-North Africa and 6% from Sub-Saharan Africa (see Table 1 for a list of the countries located in these regions). Finally, the majority of immigrants in our sample are first-generation migrants (67%). In fact, the proportion of second-generation migrants is too low in some instances to enable us to analyze first- and second-generation migrants separately. For example, only 23 Muslims from Christian-majority countries are second-generation migrants (against 288 who are first-generation migrants). We observe similar patterns for Muslim immigrants from Muslim-majority countries: only 2 Muslim immigrants from Albania (the only Muslim-majority country located in Europe) and 7 Muslim immigrants from Muslim-majority countries located in Sub-Saharan Africa are second-generation migrants. Although we cannot analyze first- and second-generation migrants separately, we include in our regressions a dummy that takes the value 1 if the respondent is a first-generation migrant and 0 if the respondent is a second-generation migrant, in order to isolate our results from a “generation of migrant” effect.

¹⁷Countries composing this region are Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia and Slovenia.

3.2 Dependent variables

Two variables allow us to measure the discrimination faced by immigrants. The first variable is subjective. It measures the perception of discrimination by the respondent. It is equal to 1 if the respondent “would describe [herself] as being a member of a group that is discriminated against” in the country where the interview is conducted, and 0 otherwise. The second variable seeks to overcome the bias of subjectivity, and assumes that a good part of unemployment in the immigrant population is due to discrimination. Therefore, our second proxy for discrimination indicates the employment status of the respondent. It is equal to 1 if the respondent is unemployed, and 0 if she is employed.

In our analysis, we consider that a group of respondents face discrimination (relative to a comparison group) if they are *both* more likely to describe themselves as discriminated against and more likely to report that they are unemployed. Indeed, only relying on the subjective measure is problematic given that a group’s feeling of being discriminated against may be disconnected from any actual discrimination. But relying only on the more objective measure poses problems as well. Even after controlling for standard socioeconomic characteristics, discrimination is obviously only one of the many factors that influence individuals’ employment status. Still, others have relied on this measure as an indicator of immigrant integration into labor markets (see Algan, Dustmann, Glitz and Manning (2010)). In combining this measure with a measure of an immigrant’s own perception of discrimination, we hope to capture a central aspect of discrimination.

3.3 Controls

Our analysis controls for the respondent’s gender, age, education and whether the respondent is a first-generation migrant. We are not able to control for the respondent’s income since this variable cannot be standardized across ESS rounds. It is important to emphasize that controlling for the respondent’s education runs against us finding any religion and/or region of origin effect, as would controlling for the respondent’s income. Education and income are indeed known to be strongly correlated with discrimination: a person who experiences discrimination has obviously fewer economic opportunities and therefore lower incentives to educate herself (see Arrow (1973) for a theory and Fryer, Goeree and Holt (2005) for experimental evidence). Table 3 provides summary statistics for the dependent variables and our set of controls.

4 Results

This section presents the four steps of our analysis. First, we test whether our proxies for the discrimination faced by immigrants are externally valid. We do so by analyzing whether, consistent with correspondence test results, Muslim immigrants from Muslim-majority countries are more discriminated against than Christian immigrants from European Christian-majority countries. In our second step, we begin to address the confound as to whether it is religion or region of origin that is the source of such discrimination by relying on an identification strategy that is blind to important confounds, such as migration history and the group’s minority/majority status. The third and fourth steps then proceed to a more sophisticated identification strategy that aims at better isolating the religion and the region of origin effects.

4.1 Step 1: Muslim immigrants from Muslim-majority countries are discriminated against relative to Christian immigrants from European Christian-majority countries

We address this question by estimating Equation (1):

$$y = a + b.(MM \text{ vs } CEC) + \mathbf{X}' \cdot \mathbf{c} + \mathbf{C}' \cdot \mathbf{d} + u, \quad (1)$$

where y represents the discrimination faced by the respondent. The dummy (MM vs CEC) is equal to 1 if the respondent is a Muslim immigrant from Muslim-majority countries and 0 if she is a Christian immigrant from European Christian-majority countries. Coefficient b therefore measures the difference in discrimination faced by these two groups of immigrants. We control for a vector \mathbf{X} of socioeconomic characteristics. This vector contains information on the gender, age, education level and migration status of the respondent (i.e. whether the respondent is a first-generation migrant). Finally, we introduce \mathbf{C} , a vector of host country fixed effects.

OLS estimates are reported in Table 4.¹⁸ Model (1) estimates the correlates of a respondent’s perception of discrimination while Model (2) estimates the correlates of a respondent’s probability of being unemployed. Our results confirm that Muslim immigrants from Muslim-majority countries are more discriminated against in Western Europe than are Christian immigrants from European Christian-majority countries: coefficient b is positive

¹⁸All our results hold if we rely on a probit or on a logit analysis. (Results available upon request).

and significant at the 1% confidence level in both models. Put differently, our results confirm findings from previous research and add confidence that our proxies for the discrimination faced by immigrants in Western Europe are externally valid.

Note that the difference in discrimination faced by Muslim immigrants from Muslim-majority countries and Christian immigrants from European Christian-majority countries is substantial. Holding the socioeconomic characteristics of the respondent constant (we set these characteristics at their mean among Muslim immigrants from Muslim-majority countries), we find that: (i) Muslim immigrants from Muslim-majority countries are 3.4 times more likely than are Christian immigrants from European Christian-majority countries to describe themselves as being members of a group that is discriminated against; (ii) being a Muslim immigrant from a Muslim-majority country (rather than a Christian immigrant from a European Christian-majority country) increases the probability that the respondent is unemployed by 25%.¹⁹

4.2 Step 2: Religion rather than region of origin is the source of discrimination

To estimate whether religion, region of origin, or both explain the difference in discrimination faced by Muslim immigrants from Muslim-majority countries and Christian immigrants from European Christian-majority countries, we first estimate Equation (2). This equation controls for religion, region of origin, and an interaction between these two variables:

$$y = a + b.\text{Muslim} + c.\text{Muslim}.\text{(M vs EC)} + d.\text{(M vs EC)} + \mathbf{X}'\mathbf{e} + \mathbf{C}'\mathbf{f} + u. \quad (2)$$

The dummy Muslim is equal to 1 if the respondent is Muslim and 0 if she is Christian. The dummy (M vs EC) is equal to 1 if the respondent is an immigrant from Muslim-majority countries and 0 if she is an immigrant from European Christian-majority countries. Variable y as well as vectors \mathbf{X} and \mathbf{C} are defined as in Equation (1).

Equation (2) first allows us to replicate the results from Equation (1). The difference in discrimination faced by Muslim immigrants from Muslim-majority countries and Christian immigrants from European Christian-majority countries is captured by the sum of coefficients

¹⁹The probability of describing oneself as being a member of a group that is discriminated against is equal to 0.10 among Christian immigrants from European Christian-majority countries, while it is equal to 0.34 among Muslim immigrants from Muslim-majority countries. Similarly, the probability of being unemployed is equal to 0.41 among Christian immigrants from European Christian-majority countries, while it is equal to 0.51 among Muslim immigrants from Muslim-majority countries.

b , c and d . Equation (2) then permits to compute the religion and the region of origin components of such discrimination.

To isolate the religion component of discrimination against Muslim immigrants from Muslim-majority countries, one must hold their region of origin constant (i.e., stemming from Muslim-majority countries) and analyze how they would fare in Western Europe if they were Christian rather than Muslim. This religion effect is captured by the sum of coefficients b and c . This sum indeed measures the difference in discrimination faced in Western Europe by Muslim immigrants from Muslim-majority countries and Christian immigrants from Muslim-majority countries.

To isolate the region of origin component of discrimination against Muslim immigrants from Muslim-majority countries, one must hold their religion constant (being Muslim) and analyze how they would fare in Western Europe if they were European rather than non-European. This region of origin effect is captured by the sum of coefficients c and d . This sum indeed measures the difference in discrimination faced in Western Europe by Muslim immigrants from Muslim-majority countries and Muslim immigrants from European Christian-majority countries.

Table 5 reports OLS estimates of Equation (2) as well as Wald tests. These tests analyze whether the religion and the region of origin components of discrimination against Muslim immigrants from Muslim-majority countries are significant. The first Wald test at the bottom of Table 5 confirms the results from Equation (1): Muslim immigrants from Muslim-majority countries are significantly more discriminated against than Christian immigrants from European Christian-majority countries. The second and the third Wald test at the bottom of Table 5 indicate that religion (being Muslim), not region of origin (stemming from countries that are mainly located outside Europe) is the source of such discrimination. The Wald test for the religion component is indeed significant at the 1% confidence level for both our proxies for the discrimination faced by immigrants in Western Europe. This is not the case for the region of origin component.

Yet, as already emphasized, two potential biases cast doubt on the validity of these results. The first bias is induced by the migration history of immigrants. When we estimate the religion effect, religion is unlikely to be the sole distinguishing characteristic between Muslim and Christian immigrants from Muslim-majority countries. For example, Christian immigrants from Muslim-majority countries likely originate from a different region. This is the case of the *pieds noirs* in France, Judeo-Christian immigrants from Algeria who are descendants of French settlers. Similarly, when we estimate the region of origin effect, it is

unlikely that Muslim immigrants from Muslim-majority countries and Muslim immigrants from European Christian-majority countries share the exact same migration history. Some of the Muslim immigrants from European Christian-majority countries may in fact be descendants of immigrants from Muslim-majority countries who settled in Europe. The second bias is induced by the minority/majority status of immigrants in their country of origin. When we estimate the religion effect, Christian immigrants from Muslim-majority countries have minority status while Muslim immigrants from Muslim-majority countries do not. Similarly, when we estimate the region of origin effect, Muslim immigrants from European Christian-majority countries have minority status while Muslim immigrants from Muslim-majority countries do not. Yet, belonging to the minority (rather than to the majority) in one's country of origin is likely to impact one's cultural adaptation skills. Therefore, minority/majority status, rather than religion or region of origin, can explain observed differences in the discrimination faced, in Western Europe, by the different groups of immigrants we focus on. The third and fourth steps in our analysis that we develop in the next section aim at better addressing these estimation issues for isolating the religion and the region of origin effects.

4.3 Steps 3 and 4: A more sophisticated identification strategy confirms the religion effect on discrimination

4.3.1 Step 3: Better identifying the religion effect

To better estimate the religion effect, we focus in our third step on a country of origin where both Muslims and Christians have settled for equal periods of time, and where neither Muslim nor Christian constitutes a clear majority or minority, Bosnia and Herzegovina. We compare the discrimination faced in Western Europe by Muslim and Christian immigrants who originate from this country. However, to avoid capturing a “Bosnian war” effect, we focus on second-generation migrants and first-generation migrants who arrived in Western Europe before 1992. Indeed, by inflicting considerable suffering on Bosniaks (Bosnian Muslims), this war is likely to have made them feel more insecure than their Christian counterparts, not only in their country of origin but also abroad. Such a feeling of insecurity is expected to be associated with a higher perception of discrimination. But such a feeling may also affect individuals' probability of being unemployed due to lower self-confidence (see Hoff and Pandey (2006) for evidence on the negative impact of individuals' perception of discrimination on their self-confidence and performance).

Step 3 of our analysis relies on Equation (3) that is estimated over the sample of Muslim and Christian immigrants from Bosnia and Herzegovina who settled in Western Europe before the Bosnian war:

$$y = a + b.\text{Muslim} + \mathbf{X}'.\mathbf{c} + \mathbf{C}'.\mathbf{d} + u. \quad (3)$$

Variables y and Muslim as well as vectors \mathbf{X} and \mathbf{C} are defined as in Equation (2). Coefficient b therefore measures the difference in discrimination faced by Muslim and Christian immigrants from Bosnia and Herzegovina.

OLS estimates are reported in Table 6. Although we are working on a small sample, our results confirm that religion matters. They show that Muslim immigrants from Bosnia and Herzegovina are significantly more discriminated against in Western Europe than are their Christian counterparts. Coefficient b is indeed positive and significant in both models.

4.3.2 Step 4: Better identifying the region of origin effect

Our fourth step allows us to better estimate the region-of-origin effect. It consists in comparing the discrimination faced in Western Europe by Muslim immigrants from the single Muslim-majority European country (Albania) and Muslim immigrants from non-European Muslim-majority countries. Such a comparison which focuses only on Muslim-majority countries of origin alleviates concerns that we are comparing populations that settled in their country of origin at vastly different times. Furthermore, it ensures a comparison of two populations that are similar in terms of majority/minority status in their country of origin: both groups indeed constitute the majority in their home countries.

Step 4 of our analysis relies on Equation (4) that is estimated over the sample of Muslim immigrants from Muslim-majority countries:

$$y = a + b.(\text{MM non Europe vs MM Europe}) + \mathbf{X}'.\mathbf{c} + \mathbf{C}'.\mathbf{d} + u. \quad (4)$$

The dummy (MM non Europe vs MM Europe) is equal to 1 if the respondent is a Muslim immigrant from a non-European Muslim-majority country and 0 if she is a Muslim immigrant from a European Muslim-majority country (i.e., Albania). Variable y as well as vectors \mathbf{X} and \mathbf{C} are defined as in Equation (1). Coefficient b therefore measures the difference between the discrimination faced by Muslim immigrants from non-European Muslim-majority countries and by Muslim immigrants from Albania.

OLS estimates are reported in Table 7. Our results confirm that region of origin plays

no role in accounting for discrimination against Muslim immigrants from Muslim-majority countries. Coefficient b is indeed significant in neither models. Put differently, we cannot identify a difference in the discrimination faced by Muslim immigrants from non-European Muslim-majority countries and by Muslim immigrants from Albania.

5 Robustness checks

In this section, we elaborate on the lack of significance of the region of origin effect. First, we test whether it is robust to considering Turkey as a European, rather than as a non-European, Muslim-majority country. Second, we analyze whether the lack of significance of the region of origin effect persists when we disentangle non-European Muslim-majority countries into sub-regions: Asia-Pacific, Middle-East North Africa and Sub-Saharan Africa.

5.1 Considering Turkey as a European Muslim-majority country

Although the Pew Research Center (2011) locates Turkey in Asia-Pacific, Turkey itself, as indicated by its formal application for membership in the European Union filed on 14 April 1987, considers itself to be European. We therefore check whether the absence of significance of the region of origin effect holds when Muslim immigrants from Turkey are considered as stemming from Muslim-majority countries located in Europe rather than in Asia-Pacific.

To do so, we estimate Equation (5) over the sample of Muslim immigrants from Muslim-majority countries:

$$y = a + b.(\text{New MM non Europe vs New MM Europe}) + \mathbf{X}' \cdot \mathbf{c} + \mathbf{C}' \cdot \mathbf{d} + u, \quad (5)$$

where the dummy (New MM non Europe vs New MM Europe) is equal to 1 if the respondent is a Muslim immigrant from a non-European Muslim-majority country once Turkey is excluded and 0 if she is a Muslim immigrant from Albania or Turkey. Variable y as well as vectors \mathbf{X} and \mathbf{C} are defined as in Equation (1).

OLS estimates are reported in Table 8. Coefficient b is significant in neither models. Our results confirm that the lack of significance of the region of origin effect is robust to considering Turkey as a European, rather than as a non-European, Muslim-majority country.

5.2 Disentangling non-European Muslim-majority countries into sub-regions

Our results on the region of origin component of discrimination against Muslim immigrants from Muslim-majority countries could hide heterogeneity across the regions in which Muslim-majority countries are located.

To test whether this is the case, we estimate Equation (6) over the sample of Muslim immigrants from Muslim-majority countries:

$$y = a + b.(\text{MM Asia-Pacific vs MM Europe}) + c.(\text{MM MENA vs MM Europe}) + d.(\text{MM SSA vs MM Europe}) + \mathbf{X}'\mathbf{e} + \mathbf{C}'\mathbf{f} + u, \quad (6)$$

where variable y and vectors \mathbf{X} and \mathbf{C} are defined as in Equation (1). The dummy (MM Asia-Pacific vs MM Europe) is equal to 1 if the respondent is a Muslim immigrant from a Muslim-majority country located in Asia-Pacific and 0 if she is a Muslim immigrant from Albania. The dummy (MM MENA vs MM Europe) is equal to 1 if the respondent is a Muslim immigrant from a Muslim-majority country located in Middle-East North Africa and 0 if she is a Muslim immigrant from Albania. The dummy (MM SSA vs MM Europe) is equal to 1 if the respondent is a Muslim immigrant from a Muslim-majority country located in Sub-Saharan Africa and 0 if she is a Muslim immigrant from Albania. Put differently, coefficients b , c and d measure the difference between the discrimination faced by Muslim immigrants from Muslim-majority countries located respectively in Asia-Pacific, Middle East-North Africa, Sub-Saharan Africa, and that faced by Muslim immigrants from the single European Muslim-majority country (i.e., Albania).

OLS estimates are reported in Table 9. Coefficient b , c and d are significant in neither models. Our results confirm that the lack of significance of the region of origin effect is robust to disentangling non-European Muslim-majority countries into sub-regions. If Muslim immigrants from the various sub-regions in which Muslim-majority countries are located face similar discrimination, it is unlikely that the rooted populations in Western European countries condition their discriminatory behavior on the region of origin of these immigrants.

6 Conclusion

There is widespread evidence that immigrants from Muslim-majority countries face systematic discrimination in Western European labor markets, relative to natives.²⁰ In France, Duguet, Léandri, L’Horty and Petit (2010) show that callback rates received by applicants with North African sounding names are much lower than those received by applicants with French sounding names. In Sweden, Carlsson and Rooth (2007), Carlsson (2010) and Rooth (2010) identify substantial discrimination against applicants with Middle Eastern sounding names (relative to applicants with Swedish sounding names). And Kass and Manger (2012) show that applicants with Turkish sounding names are discriminated against in the German labor market (relative to applicants with German sounding names).

What accounts for such discrimination? Preference for the group of natives with no recent immigration background, what Jacquemet and Yannelis (2012) call “ethnic homophily”, is surely part of the story. Yet, the fact that immigrants from Muslim-majority countries are discriminated against not only relative to natives but also relative to immigrants from European Christian-majority countries suggests that additional sources of discrimination are at stake.

Our objective in this paper is to offer a first attempt to understand these additional sources of discrimination against immigrants from Muslim-majority countries. Relying on European Social Survey data and an identification strategy that seeks to separate religion from region of origin, we analyze whether the discrimination faced in Western Europe by immigrants from Muslim-majority countries relative to immigrants from European Christian-majority countries is due to their religion, their region of origin, or both. Our findings reveal that religion rather than region of origin explains such discrimination.

Overall, our results are consistent with the experimental evidence provided by Adida, Laitin and Valfort (2010) and by Pierné (2013) according to which religion is a critical driver of discrimination against Muslims from Muslim-majority countries in France. Yet, our findings also contribute to this research by allowing us to expand its conclusion to other Western European countries. Moreover, our estimates illuminate the impact not only of the religion, but also of the region of origin of migrants: they indicate that the latter plays no role in accounting for the discrimination faced in Western Europe by Muslim immigrants from Muslim-majority countries (relative to Christian immigrants from European Christian-majority countries).

²⁰Western European countries are no exception. See Booth, Leigh and Vargonova (2012) for evidence of discrimination against immigrants from Muslim-majority countries in Australia.

To be sure, our results need to be strengthened. They indeed rely on observational, self-reported data. Two types of experimental interventions could help test the robustness of our findings in a representative set of Western European countries. First, to isolate the religious component of discrimination, a correspondence test could compare the callback rates for two applicants of Bosnian (or Lebanese) origin, differing only on religion (one of them being Muslim and the other Christian).²¹ Second, to isolate the region-of-origin component of discrimination, another correspondence test would compare the callback rates of Muslim applicants from Muslim-majority countries located in different regions (Asia-Pacific, Europe, Middle East-North Africa and Sub-Saharan Africa).

Such an approach would eliminate the two main drawbacks of the current analysis. First, it would offer a direct measure of the discrimination faced by Muslim immigrants from Muslim-majority countries in Western Europe. Second, the experimental interventions would truly isolate the effect of religion and region-of-origin, dealing namely with potentially unobservable confounds. These are important avenues for future research, and will help further clarify the implications of religion for equal opportunity in today's Europe.

But our findings are broadly significant. They show clearly that the immigration backlash throughout Europe is not merely about foreigners from regions outside of Europe threatening national cultures; rather, and despite more than a century of secularization, the backlash is most powerfully directed at Muslims. This finding is crucial for policy makers eager to find solutions to the threats to the open societies that most Europeans cherish.

References

- [1] Adida, Claire L., David D. Laitin and Marie-Anne Valfort. 2010. "Identifying barriers to Muslim integration in France." *Proceedings of the National Academy of Sciences* 107(52): 384-390.
- [2] Aleksynska, Mariya. 2011. "Civic participation of immigrants in Europe: assimilation, origin, and destination country effects." *European Journal of Political Economy*, 27(3): 566-585.
- [3] Algan, Yann, Christian Dustmann, Albrecht Glitz and Alan Manning. 2010. "The economic situation of first and second-generational immigrants in France, Germany and the United Kingdom." *Economic Journal* 120(542): F4-F30.

²¹See Neumark (2012) for the most recent methodological guidelines for running correspondence tests.

- [4] Arrow, Kenneth J. 1973. "The Theory of Discrimination," in O. Ashenfelter and A. Rees (eds.), *Discrimination in Labor Markets*, Princeton, NJ: Princeton University Press.
- [5] Bisin, Alberto, Eleonora Patacchini, Thierry A. Verdier and Yves Zenou. 2008. "Are Muslim immigrants different in terms of cultural integration?" *Journal of the European Economic Association*, 6(2-3): 445-456.
- [6] Bisin, Alberto, Eleonora Patacchini, Thierry A. Verdier and Yves Zenou. 2011. "Errata corrigé "Are Muslim immigrants different in terms of cultural integration?"" *Journal of the European Economic Association*, 9(5): 1012-1019.
- [7] Booth, Alison L., Andrew Leigh and Elena Varganova. 2012. "Does ethnic discrimination vary across minority groups? Evidence from a field experiment." *Oxford Bulletin of Economics and Statistics* 74(4): 547-573.
- [8] Carlsson, Magnus. 2010. "Experimental evidence of discrimination in the hiring of first- and second-generation immigrants." *Labour. Review of Labour Economics and Industrial Relations* 24(3): 263-278.
- [9] Carlsson, Magnus and Dan-Olof Rooth. 2007. "Evidence of ethnic discrimination in the Swedish labor market using experimental data." *Labour Economics* 14(4): 716-729.
- [10] Constant, Amelie F., Liliya Gataullina and Klaus F. Zimmermann. 2009. "Ethnosizing immigrants." *Journal of Economic Behavior and Organization*, 69(3): 274-287.
- [11] Duguet, Emmanuel, Noam Léandri, Yannick L'Horty and Pascale Petit. 2010. "Are young French jobseekers of ethnic immigrant origin discriminated against? A controlled experiment in the Paris area." *Annals of Economics and Statistics* 99-100: 187-215.
- [12] Firth, Michael. 1981. "Racial discrimination in the British labour market." *Industrial and Labor Relations Review* 34(2): 265-272.
- [13] Fryer, Roland G., Jacob K. Goeree and Charles A. Holt. 2005. "Experience-based discrimination: classroom games." *Journal of Economic Education* 36(2): 160-170.
- [14] Hainmueller, Jens and Dominik Hangartner. 2013. "Who gets a Swiss passport? A natural experiment in immigrant discrimination." *American Political Science Review* 107(1): 159-187.

- [15] Hoff, Karla and Priyanka Pandey. 2006. "Discrimination, social identity, and durable inequalities." *American Economic Review* 96(2): 206-211.
- [16] Jacquemet, Nicolas and Constantine Yannelis. 2012. "Indiscriminate discrimination: a correspondence test for ethnic homophily in the Chicago labor market." *Labour Economics* 19(6): 824-832.
- [17] Jowell, Roger and Patricia Prescott-Clarke. 1970. "Racial discrimination and white-collar workers in Britain." *Race & Class* 11(4): 397-417.
- [18] Kaas, Leo and Christian Manger. 2012. "Ethnic discrimination in Germany's labour market: a field experiment." *German Economic Review* 13(1): 1-20.
- [19] Manning, Alan and Sanchari Roy. 2010. "Culture clash or culture club? National identity in Britain." *Economic Journal*, 120(542): F72-F100.
- [20] McIntosh, Neil and David John Smith. 1974. "The Extent of racial discrimination." Political and Economic Planning Broadsheet no. 547, London: Political and Economic Planning.
- [21] Neumark, David. 2012. "Detecting discrimination in audit and correspondence studies." *Journal of Human Resources* 47(4): 1128-1157.
- [22] Pew Research Center Report. 2011. "The future of the global Muslim population. Projections for 2010-2030."
- [23] Pierné, Guillaume. 2013. "Hiring discriminations based on national origin and religious closeness." Forthcoming in *IZA: Journal of Labour Economics*.
- [24] Riach, Peter A. and Judith Rich. 2002. "Field experiments of discrimination in the market place." *Economic Journal* 112(483): 480-518.
- [25] Riach, Peter A. and Judith Rich. 2004. "Deceptive field experiments of discrimination: are they ethical?" *Kyklos* 57(3): 547-470.
- [26] Rooth, Dan-Olof. 2010. "Automatic associations and discrimination in hiring: real world evidence." *Labour Economics* 17(3): 523-534.

7 Tables

Table 1: Share of the Muslim population in Muslim-majority countries

| Share of the Muslim population in % | | Share of the Muslim population in % | |
|--|------|-------------------------------------|------|
| <u>Asia-Pacific</u> | | Libya | 96.6 |
| Afghanistan | 99.8 | Morocco | 99.9 |
| Azerbaijan | 98.4 | Oman | 87.7 |
| Bangladesh | 90.4 | Palestinian territories | 97.5 |
| Brunei | 51.9 | Qatar | 77.5 |
| Indonesia | 88.1 | Saudi Arabia | 97.1 |
| Iran | 99.7 | Sudan | 71.4 |
| Kazakhstan | 56.4 | Syria | 92.8 |
| Kyrgyzstan | 88.8 | Tunisia | 99.8 |
| Malaysia | 61.4 | United Arab Emirates | 76.0 |
| Maldives | 98.4 | Western Sahara | 99.6 |
| Pakistan | 96.4 | Yemen | 99.0 |
| Tajikistan | 99.0 | <u>Sub-Saharan Africa</u> | |
| Turkey | 98.6 | Burkina Faso | 58.9 |
| Turkmenistan | 93.3 | Chad | 55.7 |
| Uzbekistan | 96.5 | Comoros | 98.3 |
| <u>Europe</u> | | Djibouti | 97.0 |
| Albania | 82.1 | Gambia | 95.3 |
| <u>Middle East-North Africa</u> | | Guinea | 84.2 |
| Algeria | 98.2 | Mali | 92.4 |
| Bahrain | 81.2 | Mauritania | 99.2 |
| Egypt | 94.7 | Niger | 98.3 |
| Iraq | 98.9 | Senegal | 95.9 |
| Jordan | 98.8 | Sierra Leone | 71.5 |
| Kuwait | 86.4 | Somalia | 98.6 |
| Lebanon | 59.7 | | |

Notes: This table displays the share of the Muslim population in the 47 Muslim-majority countries (i.e. countries where more than 50% of the population is Muslim), as reported by the Pew Research Center (2011) for year 2010.

Table 2: Religion, region of origin and generation of immigrants.

| | Proportion | Proportion of first-generation migrants |
|---|---------------------------------|---|
| All | 100% (N=9,546) | 67% (N=6,387) |
| Christian and Muslim immigrants from European Christian-majority countries | 73% (N=6,970) | 65% (N=4,546) |
| Christian and Muslim immigrants from Muslim-majority countries | 27% (N=2,579) | 71% (N=1,841) |
| Christian and Muslim immigrants from European Christian-majority countries | 100% (N=6,970) | 65% (N=4,546) |
| Christians | 95.5% (N=6,659) | 64% (N=4,258) |
| Muslims, among whom immigrants from: | 4.5% (N=311) | 93% (N=288) |
| <i>The former Yugoslavia</i> | 85% (N=265) | 93% (N=247) |
| Christian and Muslim immigrants from Muslim-majority countries | 100% (N=2,579) | 71% (N=1,841) |
| Christians | 39% (N=1,012) | 62% (N=628) |
| Muslims, among whom immigrants from: | 61% (N=1,567) | 77% (N=1,213) |
| <i>Asia-Pacific</i> | 45% (N=706) | 75.5% (N=533) |
| <i>Europe (i.e., Albania)</i> | 6% (N=100) | 98% (N=98) |
| <i>Middle East-North Africa</i> | 43% (N=670) | 74% (N=498) |
| <i>Sub-Saharan Africa</i> | 6% (N=91) | 92% (N=84) |

Table 3: Descriptive statistics

| | Mean | Standard Deviation | Min | Max | Observations |
|---------------------------------------|-------|--------------------|-----|-----|--------------|
| Panel A: Dependent variables | | | | | |
| Perception of discrimination | 0.14 | 0.34 | 0 | 1 | 9,425 |
| Probability of being unemployed | 0.50 | 0.50 | 0 | 1 | 9,488 |
| Panel B: Controls | | | | | |
| Male | 0.46 | 0.50 | 0 | 1 | 9,542 |
| Age | 44.90 | 17.65 | 16 | 98 | 9,495 |
| Less than lower secondary education | 0.17 | 0.37 | 0 | 1 | 9,463 |
| Lower secondary education completed | 0.20 | 0.40 | 0 | 1 | 9,463 |
| Upper secondary education completed | 0.35 | 0.48 | 0 | 1 | 9,463 |
| Post-secondary non-tertiary education | 0.05 | 0.22 | 0 | 1 | 9,463 |
| Tertiary education completed | 0.23 | 0.42 | 0 | 1 | 9,463 |
| First-generation migrant | 0.67 | 0.47 | 0 | 1 | 9,549 |

Notes: Our sample is composed of 9,546 respondents. These respondents are Christian and Muslim immigrants from European Christian-majority countries and Christian and Muslim immigrants from Muslim-majority countries. The variable “perception of discrimination” is equal to 1 if the respondent “would describe [herself] as being a member of a group that is discriminated against” in the country where the interview is conducted, and 0 otherwise. The variable “unemployed” is equal to 1 if the respondent is unemployed and 0 if she is employed. The variable “male” is equal to 1 if the respondent is male and 0 if she is female. The variable “age” is equal to the age of the respondent. The set of dummies related to education (“less than lower secondary education”, “lower secondary education completed”, “upper secondary education completed”, “post-secondary non-tertiary education” and “tertiary education completed”) capture the highest level of education of the respondent. The variable “first-generation migrant” is equal to 1 if the respondent is a first-generation migrant and 0 if she is a second-generation migrant.

Table 4: Step 1: Muslim immigrants from Muslim-majority countries are discriminated against relative to Christian immigrants from European Christian-majority countries

| | Dep. var.: Perception of discrimination | Dep. var.: Probability of unemployment |
|---|---|--|
| | (1) | (2) |
| (1) (MM <i>vs</i> CEC) | 0.245*** (0.014) | 0.105*** (0.016) |
| (2) Male | 0.005 (0.007) | -0.181*** (0.010) |
| (3) Age | -0.001*** (0.000) | 0.007*** (0.000) |
| (4) Lower secondary education completed | 0.012 (0.013) | -0.007 (0.018) |
| (5) Upper secondary education completed | 0.004 (0.012) | -0.129*** (0.016) |
| (6) Post-secondary non-tertiary education | -0.021 (0.017) | -0.220*** (0.027) |
| (7) Tertiary education completed | 0.011 (0.013) | -0.264*** (0.017) |
| (8) First-generation migrant | 0.027*** (0.007) | -0.047*** (0.011) |
| Host country fixed effects | Yes | Yes |
| R^2 | 0.126 | 0.154 |
| Observations | 7,998 | 8,059 |

Notes: This table reports OLS estimates. The variable “perception of discrimination” is equal to 1 if the respondent “would describe [herself] as being a member of a group that is discriminated against” in the country where the interview is conducted, and 0 otherwise. The variable “unemployed” is equal to 1 if the respondent is unemployed and 0 if she is employed. The variable “(MM *vs* CEC)” is equal to 1 if the respondent is a Muslim immigrant from Muslim-majority countries and 0 if she is a Christian immigrant from European Christian-majority countries. The variable “male” is equal to 1 if the respondent is male and 0 if she is female. The variable “age” is equal to the age of the respondent. The set of dummies related to education (“lower secondary education completed”, “upper secondary education completed”, “post-secondary non-tertiary education” and “tertiary education completed”) capture the highest level of education of the respondent. The dummy “less than lower secondary education” is the reference category. The variable “first-generation migrant” is equal to 1 if the respondent is a first-generation migrant and 0 otherwise. Standard errors are robust. *, ** and *** indicate significance at the 10, 5 and 1% levels.

Table 5: Step 2: Religion rather than region of origin is the source of discrimination

| | Dep. var.: Perception of discrimination | Dep. var.: Probability of unemployment |
|--|---|--|
| | (1) | (2) |
| (1) Muslim | 0.155*** | 0.080*** |
| | (0.026) | (0.029) |
| (2) Muslim.(M vs EC) | 0.008 | -0.005 |
| | (0.032) | (0.035) |
| (3) (M vs EC) | 0.074*** | 0.031* |
| | (0.015) | (0.018) |
| (4) Male | 0.007 | -0.179*** |
| | (0.007) | (0.010) |
| (5) Age | -0.002*** | 0.007*** |
| | (0.000) | (0.000) |
| (6) Lower secondary education completed | 0.011 | -0.015 |
| | (0.012) | (0.016) |
| (7) Upper secondary education completed | 0.004 | -0.135*** |
| | (0.011) | (0.015) |
| (8) Post-secondary non-tertiary education | -0.023 | -0.226*** |
| | (0.016) | (0.025) |
| (9) Tertiary education completed | 0.007 | -0.271*** |
| | (0.012) | (0.016) |
| (10) First-generation migrant | 0.044*** | -0.057*** |
| | (0.007) | (0.010) |
| Discrimination against Muslims from Muslim-majority countries (Wald test p-value for (1)+(2)+(3)= 0) | 0.000 | 0.000 |
| Religion component (Wald test p-value for (1)+(2)= 0) | 0.000 | 0.000 |
| Region of origin component (Wald test p-value for (2)+(3)= 0) | 0.004 | 0.400 |
| Host country fixed effects | Yes | Yes |
| R^2 | 0.116 | 0.159 |
| Observations | 9,292 | 9,369 |

Notes: This table reports OLS estimates. The variable “perception of discrimination” is equal to 1 if the respondent “would describe [herself] as being a member of a group that is discriminated against” in the country where the interview is conducted, and 0 otherwise. The variable “unemployed” is equal to 1 if the respondent is unemployed and 0 if she is employed. The variable “Muslim” is equal to 1 if the respondent is Muslim and 0 if she is Christian. The variable “(M vs EC)” is equal to 1 if the respondent is an immigrant from Muslim-majority countries and 0 if she is an immigrant from European Christian-majority countries. The variable “male” is equal to 1 if the respondent is male and 0 if she is female. The variable “age” is equal to the age of the respondent. The set of dummies related to education (“lower secondary education completed”, “upper secondary education completed”, “post-secondary non-tertiary education” and “tertiary education completed”) capture the highest level of education of the respondent. The dummy “less than lower secondary education” is the reference category. The variable “first-generation migrant” is equal to 1 if the respondent is a first-generation migrant and 0 otherwise. Standard errors are robust. *, ** and *** indicate significance at the 10, 5 and 1% levels.

Table 6: Step 3: A more sophisticated identification strategy confirms the religion effect on discrimination

| | Dep. var.: Perception of discrimination | Dep. var.: Probability of unemployment |
|---|---|--|
| | (1) | (2) |
| (1) Muslim | 0.226* | 0.476** |
| | (0.136) | (0.232) |
| (2) Male | -0.068 | -0.029 |
| | (0.088) | (0.147) |
| (3) Age | 0.009* | 0.006 |
| | (0.005) | (0.010) |
| (4) Lower secondary education completed | -0.193 | 0.025 |
| | (0.252) | (0.327) |
| (5) Upper secondary education completed | -0.298 | -0.010 |
| | (0.211) | (0.315) |
| (6) Post-secondary non-tertiary education | -0.455** | -0.423 |
| | (0.210) | (0.292) |
| (7) Tertiary education completed | -0.283 | -0.096 |
| | (0.205) | (0.331) |
| (8) First-generation migrant | -0.169 | -0.202 |
| | (0.127) | (0.257) |
| Host country fixed effects | Yes | Yes |
| R^2 | 0.389 | 0.280 |
| Observations | 51 | 50 |

Notes: This table reports OLS estimates over the subsample of Christian immigrants from European Christian-majority countries and Muslim immigrants from Muslim-majority countries. The variable “perception of discrimination” is equal to 1 if the respondent “would describe [herself] as being a member of a group that is discriminated against” in the country where the interview is conducted, and 0 otherwise. The variable “unemployed” is equal to 1 if the respondent is unemployed and 0 if she is employed. The variable “Muslim” is equal to 1 if the respondent is Muslim and 0 if she is Christian. The variable “male” is equal to 1 if the respondent is male and 0 if she is female. The variable “age” is equal to the age of the respondent. The set of dummies related to education (“lower secondary education completed”, “upper secondary education completed”, “post-secondary non-tertiary education” and “tertiary education completed”) capture the highest level of education of the respondent. The dummy “less than lower secondary education” is the reference category. The variable “first-generation migrant” is equal to 1 if the respondent is a first-generation migrant and 0 otherwise. Standard errors are robust. *, ** and *** indicate significance at the 10, 5 and 1% levels.

Table 7: Step 4: A more sophisticated identification strategy confirms that region of origin plays no role

| | Dep. var.: Perception of discrimination | Dep. var.: Probability of unemployment |
|---|---|--|
| | (1) | (2) |
| (1) (MM non Europe <i>vs</i> MM Europe) | -0.008 (0.082) | 0.033 (0.075) |
| (2) Male | 0.019 (0.025) | -0.267*** (0.025) |
| (3) Age | -0.000 (0.001) | -0.001 (0.001) |
| (4) Lower secondary education completed | -0.009 (0.037) | -0.063* (0.035) |
| (5) Upper secondary education completed | 0.016 (0.037) | -0.175*** (0.035) |
| (6) Post-secondary non-tertiary education | -0.138** (0.062) | -0.239*** (0.069) |
| (7) Tertiary education completed | 0.036 (0.043) | -0.246*** (0.043) |
| (8) First-generation migrant | -0.115*** (0.035) | -0.077** (0.034) |
| Host country fixed effects | Yes | Yes |
| R^2 | 0.055 | 0.126 |
| Observations | 1,477 | 1,521 |

Notes: This table reports OLS estimates over the subsample of Christian immigrants from European Christian-majority countries and Muslim immigrants from Muslim-majority countries. The variable “perception of discrimination” is equal to 1 if the respondent “would describe [herself] as being a member of a group that is discriminated against” in the country where the interview is conducted, and 0 otherwise. The variable “unemployed” is equal to 1 if the respondent is unemployed and 0 if she is employed. The variable “(MM non Europe *vs* MM Europe)” is equal to 1 if the respondent is a Muslim immigrant from a non-European Muslim-majority country and 0 if she is a Muslim immigrant from a European Muslim-majority country (i.e., Albania). The variable “male” is equal to 1 if the respondent is male and 0 if she is female. The variable “age” is equal to the age of the respondent. The set of dummies related to education (“lower secondary education completed”, “upper secondary education completed”, “post-secondary non-tertiary education” and “tertiary education completed”) capture the highest level of education of the respondent. The dummy “less than lower secondary education” is the reference category. The variable “first-generation migrant” is equal to 1 if the respondent is a first-generation migrant and 0 otherwise. Standard errors are robust. *, ** and *** indicate significance at the 10, 5 and 1% levels.

Table 8: Considering Turkey as a European Muslim-majority country: robustness check

| | Dep. var.: Perception of discrimination | Dep. var.: Probability of unemployment |
|---|---|--|
| | (1) | (2) |
| (1) (New MM non Europe <i>vs</i> New MM Europe) | -0.018 (0.032) | -0.028 (0.032) |
| (2) Male | 0.018 (0.025) | -0.268*** (0.025) |
| (3) Age | -0.000 (0.001) | -0.001 (0.001) |
| (4) Lower secondary education completed | -0.009 (0.037) | -0.062* (0.035) |
| (5) Upper secondary education completed | 0.015 (0.037) | -0.176*** (0.035) |
| (6) Post-secondary non-tertiary education | -0.140** (0.063) | -0.242*** (0.068) |
| (7) Tertiary education completed | 0.034 (0.043) | -0.249*** (0.043) |
| (8) First-generation migrant | -0.115*** (0.035) | -0.077** (0.034) |
| Host country fixed effects | Yes | Yes |
| R^2 | 0.055 | 0.126 |
| Observations | 1,477 | 1,521 |

Notes: This table reports OLS estimates over the subsample of Christian immigrants from European Christian-majority countries and Muslim immigrants from Muslim-majority countries. The variable “perception of discrimination” is equal to 1 if the respondent “would describe [herself] as being a member of a group that is discriminated against” in the country where the interview is conducted, and 0 otherwise. The variable “unemployed” is equal to 1 if the respondent is unemployed and 0 if she is employed. The variable “(New MM non Europe *vs* New MM Europe)” is equal to 1 if the respondent is a Muslim immigrant from a non-European Muslim-majority country once Turkey is excluded and 0 if she is a Muslim immigrant from Albania or Turkey. The variable “male” is equal to 1 if the respondent is male and 0 if she is female. The variable “age” is equal to the age of the respondent. The set of dummies related to education (“lower secondary education completed”, “upper secondary education completed”, “post-secondary non-tertiary education” and “tertiary education completed”) capture the highest level of education of the respondent. The dummy “less than lower secondary education” is the reference category. The variable “first-generation migrant” is equal to 1 if the respondent is a first-generation migrant and 0 otherwise. Standard errors are robust. *, ** and *** indicate significance at the 10, 5 and 1% levels.

Table 9: Disentangling non-European Muslim-majority countries into sub-regions: robustness check

| | Dep. var.: Perception of discrimination | Dep. var.: Probability of unemployment |
|---|---|--|
| | (1) | (2) |
| (1) (MM Asia-Pacific <i>vs</i> MM Europe) | 0.010 (0.083) | -0.031 (0.076) |
| (2) (MM MENA <i>vs</i> MM Europe) | 0.007 (0.084) | -0.040 (0.078) |
| (3) (MM SSA <i>vs</i> MM Europe) | -0.017 (0.096) | 0.006 (0.092) |
| (4) Male | 0.019 (0.025) | -0.267*** (0.025) |
| (5) Age | -0.000 (0.001) | -0.001 (0.001) |
| (6) Lower secondary education completed | -0.010 (0.037) | -0.062* (0.035) |
| (7) Upper secondary education completed | 0.015 (0.037) | -0.174*** (0.035) |
| (8) Post-secondary non-tertiary education | -0.138** (0.062) | -0.239*** (0.068) |
| (9) Tertiary education completed | 0.037 (0.043) | -0.245*** (0.043) |
| (10) First-generation migrant | -0.113*** (0.035) | -0.079** (0.034) |
| Host country fixed effects | Yes | Yes |
| R^2 | 0.055 | 0.126 |
| Observations | 1,477 | 1,521 |

Notes: This table reports OLS estimates over the subsample of Christian immigrants from European Christian-majority countries and Muslim immigrants from Muslim-majority countries. The variable “perception of discrimination” is equal to 1 if the respondent “would describe [herself] as being a member of a group that is discriminated against” in the country where the interview is conducted, and 0 otherwise. The variable “unemployed” is equal to 1 if the respondent is unemployed and 0 if she is employed. The variable “(MM Asia-Pacific *vs* MM Europe)” is equal to 1 if the respondent is a Muslim immigrant from a Muslim-majority country located in Asia-Pacific and 0 if she is a Muslim immigrant from Albania. The variable “(MM MENA *vs* MM Europe)” is equal to 1 if the respondent is a Muslim immigrant from a Muslim-majority country located in Middle-East North Africa and 0 if she is a Muslim immigrant from Albania. The variable “(MM SSA *vs* MM Europe)” is equal to 1 if the respondent is a Muslim immigrant from a Muslim-majority country located in Sub-Saharan Africa and 0 if she is a Muslim immigrant from Albania. The variable “male” is equal to 1 if the respondent is male and 0 if she is female. The variable “age” is equal to the age of the respondent. The set of dummies related to education (“lower secondary education completed”, “upper secondary education completed”, “post-secondary non-tertiary education” and “tertiary education completed”) capture the highest level of education of the respondent. The dummy “less than lower secondary education” is the reference category. The variable “first-generation migrant” is equal to 1 if the respondent is a first-generation migrant and 0 otherwise. Standard errors are robust. *, ** and *** indicate significance at the 10, 5 and 1% levels.