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Public Opinion and Immigration: Who Favors Employment Discrimination against Immigrants?

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Abstract

Using information from the world values survey wave 6 containing information from 78,743 respondents in 53 countries, we examine the factors which influence respondents' answers to the question: "*when jobs are scarce, should employers give priority to people of the country of origin rather than immigrants?*" Taking into account a number of factors including, economic, socio-demographic, political and individual level characteristics we find that all of these factors influence respondents' preference for this form of discrimination.

Keywords: International migration, discrimination, public opinion.

JEL codes: F22, J71, J79.

1. Introduction

The integration of immigrants into society where they live has become the subject of recurrent debate and is a key issue in the political agenda of many countries¹. For instance, a large majority of Greek (70%), Swedish (65%) and French (65%) and little over half of Italians (52%) and German (51%) believe that immigrants living in their country are poorly integrated into society, German Marshall Fund Transatlantic Trends². Many consider immigrants' integration to be a one-way process, blaming immigrants for the failure to integrate into society, ignoring that their economic integration is one of the key preconditions for their full integration into society.

However, a number of indicators show that immigrant labor market outcomes are much lower compared to native labor market outcomes. In general, immigrants exhibit substantially lower employment and higher unemployment rates compared to natives-born counterparts. For example, according to OECD statistics the employment rate gap between native-born and immigrants exceeds 11 percentage points in countries such as Belgium Denmark, Netherlands and Sweden in 2015³. Similarly the foreign-born unemployment rate exceeds 25% in Greece and Spain, and the disparity between immigrant and non-immigrant unemployment rates is particularly pronounced in Austria, Belgium, Denmark, Norway, Sweden and Switzerland where the immigrant unemployment rate represents more than twice that of the native-born⁴.

This discrepancy can be partially explained by different factors, including differences between immigrants and non-immigrants in terms of qualifications, social and professional networks, work experience, language skills, jobs requiring nationality requirements, problem of recognition of foreign diplomas and qualifications, especially if earned in developing countries, and in some cases differences in educational attainment⁵, see OECD (2013). Apart

¹ For instance, this debate has been recently launched in Europe by the arrival of refugees, the so-called "migrant crisis" or "refugees crisis", considered less likely to integrate into societies where they have found protection. Their integration, in particular economic integration poses a challenge, since in general their labor market integration into the host countries labor market could take time. However, a number of studies point in the same direction: refugees have a lower employment rate upon arrival in hosts countries compared to other categories of immigrants, but that after a certain period of time, the employment gap decreases or disappears. For a discussion of these aspects see, for example, Bevelander (2016): <https://wol.iza.org/uploads/articles/269/pdfs/integrating-refugees-into-labor-markets.one-pager.pdf?v=1> (accessed March 2017). This means that the process of immigrants adaptation to societies where they live require time and the implementation of policies that could favor their access to the labor market.

² http://trends.gmfus.org/files/2014/09/Trends_Immigration_2014_web.pdf (accessed March 2017).

³ Foreign Born Unemployment, OECD: <https://data.oecd.org/migration/foreign-born-unemployment.htm#indicator-chart> (retrieved March 2017).

⁴ <https://data.oecd.org/migration/foreign-born-unemployment.htm#indicator-chart>

⁵ It is important to note that the situation of immigrants' vis-à-vis the native born in terms of educational attainment varies considerably between countries. For instance, the Eurostat statistics show that the proportion of tertiary educated among native-born is much higher than the equivalent proportion among foreign-born in 13 EU member states. And this gap exceeds 15 percentage points in Slovenia, Greece, Spain and Finland. In contrast, in 14 EU countries the foreign-born are better educated than native-born, see: http://ec.europa.eu/eurostat/statistics-explained/index.php/Migrant_integration_statistics_-

from these factors, a number of studies provide strong evidence of the existence of discrimination against immigrants in access to employment. Therefore, the role of discrimination as a major barrier preventing foreign-born workers from fully participating in the labor market should be not neglected, see Cediey and Foroni (2007); McGinnity and Lunn (2011), among others.

These views are not just limited to the global North, but are also present in the global South with the increase in South-South migration. For instance, in 2004, Cote d'Ivoire passed a law that gave nationals priority in employment over foreign-born people in all forms of jobs from qualified to manual labor, Gagnon and Khoudour-Casteras (2011). Similarly, Sierra Leone's constitution permits discrimination against immigrants, Gagnon and Khoudour-Casteras (2012), while the government of Nigeria has been found to actively discriminate against immigrants, OECD (2011). In Malaysia, there has been resentment against immigrants for taking jobs away from nationals, particularly in the Sabah region, Tajari and Affendi (2015).

More worrying is the fact that today a sizeable proportion of citizens belonging to different countries are in favor of discrimination against immigrants in employment. The most recent wave of the world values survey (wave 6)⁶ reveals that, about half of the respondents in Argentina (48%), New Zealand (49%), United States (52%) and Rwanda (53%) agree with the statement that, "When jobs are scarce, employers should give priority to people of this country over immigrants," and a much higher proportion of people in countries such as Jordan (93%), Qatar (87%), Philippines (80%) and Poland (71%) share this opinion. This could be considered a proxy for what Gary Becker (1957), the laureate of Nobel prize in economics, calls a "taste for discrimination"⁷.

Thus, using the most recent wave of the World Values Survey (wave 6), the objective of this study is to investigate if people have a "taste for discrimination." In other words, the research question posed by this study will be: *"when jobs are scarce, should employers give priority to people of the country of origin rather than immigrants?"* The aim of this research is to provide some important insights into whether people believe that jobs should be given to natives rather than immigrants when jobs are scarce, and to understand the factors influencing

_education (accessed March 2017). However, despite that higher education favors individuals' employment opportunities a study has found that the gap in terms unemployment rate between immigrants and the native-born and immigrants tend to increase with the level of education, OCDE (2007).

⁶ <http://www.worldvaluessurvey.org/WVSContents.jsp>

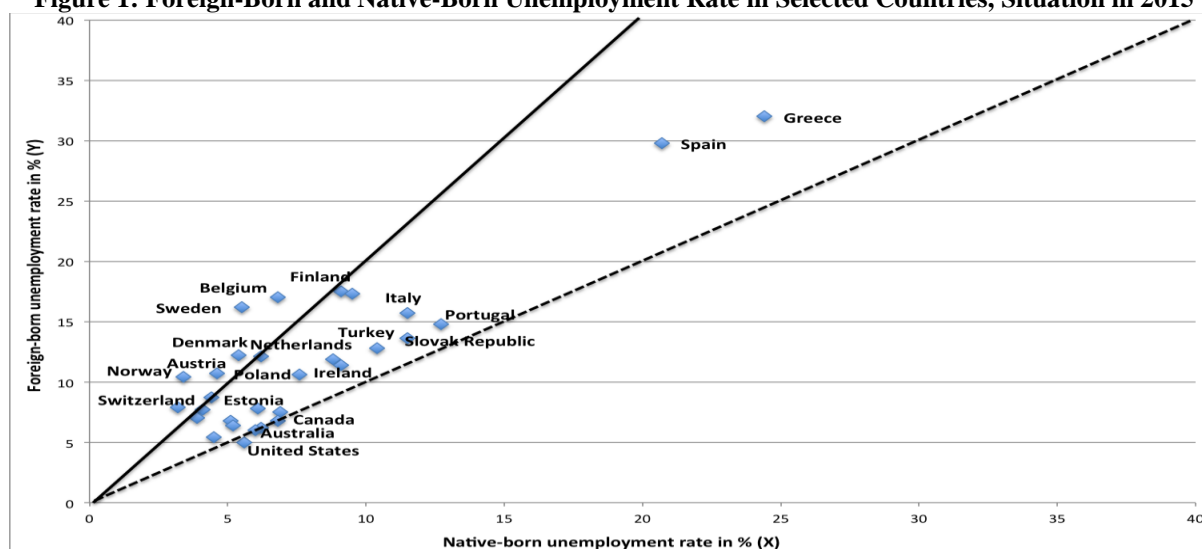
⁷ The pioneering work of Becker (1957) puts forward the idea that under-representation of certain groups of individuals in the labor market is the result of what he calls "taste for discrimination" (personal taste for discrimination) from three stakeholders: employers, employees and consumers. In the analysis of Becker, this "taste for discrimination" leads employers to hire persons belonging to a particular group over another, and aversion of employees and consumers to work or be contact with members of persons with the discriminated group.

this decision that is not related to workers productivity. We investigate this question by employing a multilevel modeling approach which allows taking into account the hierarchical nature of the data. We consider not only economic, but also socio-demographic variables, and variables which capture anti-migrant sentiments, Scheepers et al. (2002); Semyonov et al. (2006). It is important to understand the answers to this question from a policy perspective for, if a “taste for discrimination“ did exist, policies to minimize these inequalities that are not related to the productivity of labor need to be understood. The rest of the paper is organized as follows: The following section provides stylized facts. Section 3 discusses the literature. Section 4 describes the data. Section 5 discusses the empirical strategy and results. Finally, the last section concludes the paper.

2. Stylized Facts

There is a wide consensus on the view that the economic integration of individuals’ is the first step towards their social and cultural integration. A number of indicators however, reveal that in general, immigrants lag far behind non-immigrant workers in terms of employment in the labor market. For example, Figure 1 shows that, on average, the unemployment rate for foreign-born persons in Greece and Spain were 32% and 30% in 2015, compared with 24% and 21% for native-born, respectively. The same figure also reveals that the disparity between immigrant and non-immigrant unemployment rates is particularly pronounced in Austria, Belgium, Denmark, Norway, Sweden and Switzerland where the immigrant unemployment rate represents more than twice that of the native-born.

Figure 1: Foreign-Born and Native-Born Unemployment Rate in Selected Countries, Situation in 2015



Note: The dash line represents equality between foreign-born and native-born unemployment rates and the solid line indicates that foreign-born unemployment rate represents double that of the native-born unemployment rate.

Source: OECD (<https://data.oecd.org/migration/foreign-born-unemployment.htm#indicator-chart>) and authors’ calculations.

A number of studies suggest that in general, immigrants face barriers in recruitment. For instance, Cediey and Foroni (2007); McGinnity and Lunn (2011), provide strong evidence of the existence of discrimination against immigrants in terms of access to employment. While discrimination in hiring could be considered a major obstacle to immigrants' integration, the world value survey data reveal that roughly nine-in-ten people in Azerbaijan (87%), Taiwan (88%), Malaysia (90%) and Jordan (93%) and at least seven-in-ten people in 26 other countries, e.g. Nigeria (70%), Poland (71%), Pakistan (72%), Brazil (74%), Egypt (84%) and Qatar (86%), want employers to give preference to non-immigrant workers in hiring. In contrast, at the other end of the scale, a lower percentage of respondents in Sweden (13%) and Bahrain (27%) express the same opinion, see Figure 2. These statistics reveal that many citizens believe that preference should be given to citizens over immigrants in the labor market. In this context, public policies and actions that favor equal opportunities for all may not produce desired effects due to lack of public support.

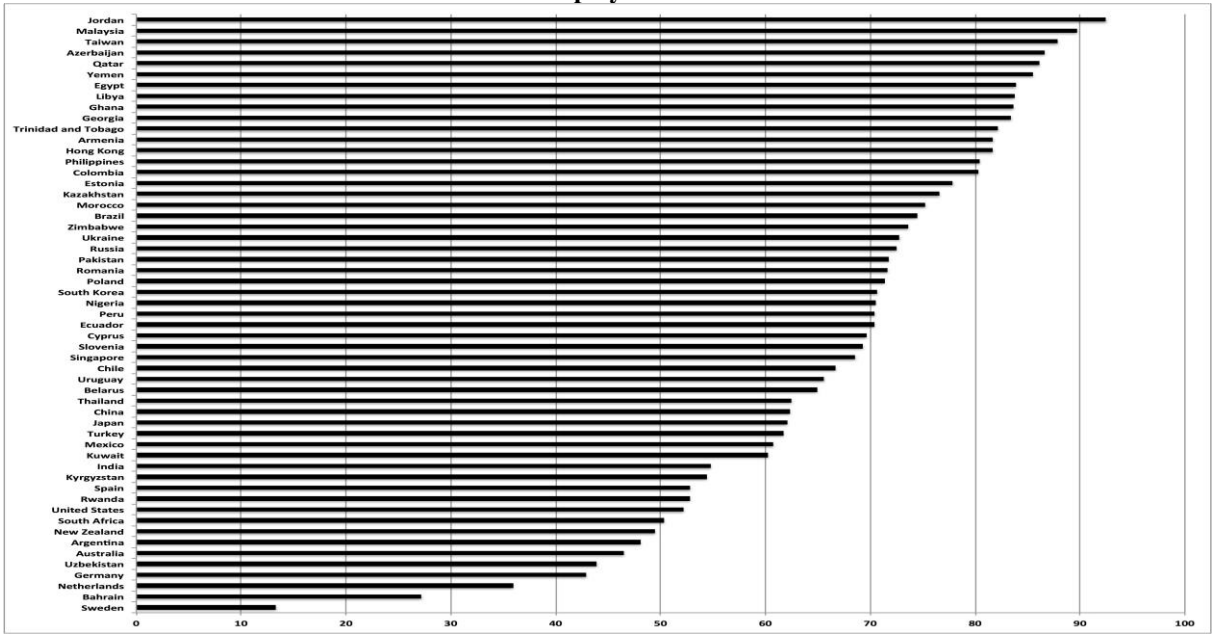
Among the factors that have influenced destination countries for migrants have been colonial ties, a common language and networks. In addition, events such as the mass recruitment of Turkish and Moroccan workers at the end of the 1960s and the beginning of the 1970s by EU countries, war and civil conflict have affected the decision of migrants when selecting destination countries, European Commission (2000)⁸. Today 86 per cent of the world's refugees under UNHCR mandate are hosted by developing countries (13.9 million persons), the highest value in more than two decades. The least developed countries provided asylum to 26 per cent of the global refugee total. In 2016, Turkey is the largest refugee-hosting country worldwide, with 2.9 million refugees, followed by Pakistan (1.4 million), Lebanon (1.0 million), Iran (979.4 thousands), Uganda (940.8 thousands) and Ethiopia (791.6 thousands), UN High Commissioner for Refugees, UNHCR (2017). These countries which have been traditionally migrant sending countries have now become receiving countries and appear to be less tolerant towards migrants. Marfouk (2014) finds that in general a high proportion of the citizens of the countries characterized by a negative net migration rate (number of emigrants exceed the number of immigrants) would not want immigrants as Neighbors, e.g. Thailand (43%), Mali (25%) while this proportion is much lower in countries which have traditionally had more open policies towards immigration, e.g. 4% in Canada, 5% in Norway, 7% Denmark. The same study reveals that in a number of countries with very low levels of immigration, a large proportion of the population is in favor of restrictive immigration policies, e.g. Thailand (79%), Mexico (40%). This is examined in

⁸ <https://www.nidi.nl/shared/content/output/2000/eurostat-2000-theme1-pushpull.pdf> (accessed March 2017).

greater detail in Section V. Very few comprehensive or comparative studies however, have been undertaken on this topic.

The social science literature on attitudes towards immigration has focused on different theories that point to the role of various factors in explaining anti-immigrant prejudice. One of the most widely used is the realistic group conflict theory, see Esses and al. (2001). According to this theory negative attitudes of one group towards other groups results from the perception that the groups in question are in completion for scarce resources, leading to conflict and discriminatory practices. The competition might concern material resources, such as employment. According to this theory negative attitudes to immigrants’ results from the perception that immigrants threaten native-born job opportunities. This perception could explain the fact that a significant proportion of individuals are in favor of discrimination against immigrants and foreign workers in terms access of employment.

Figure 2- Proportion of Individuals Who Favor Discrimination against Immigrants in Terms of Access to Employment



Source: World Value Survey and authors’ Calculations.

Employers will often justify their discriminatory practices as a simple response to the expectations of their customers. For example, the French High Council for Integration (1998)⁹ highlighted that is not uncommon to see as an attitude discrimination based on taking into account the real or supposed racism of others. For example, an employer who denies any racist or xenophobic sentiment expects to justify its refusal to employ a foreigner on the grounds that it might offend customers or "steer" other employees.

⁹ <http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/994000073.pdf> (accessed March 2017).

Thus following from this discussion we aim to analyze the determinants of individual preferences for discrimination against immigrants in access to employment. This is an issue which has not received much attention despite the fact that this research question is related to an extensive literature focusing on the factors influencing attitudes towards immigration.

3. The Literature

A number of studies examine reasons for anti-immigration sentiment. Studies have put forward both economic and non-economic factors as reasons for exclusionary attitudes towards migrants. Non-economic factors include, socio-demographic factors, Gorodzeisky and Semyonov (2009); Dustmann and Preston (2007), political factors, Espenshade and Hempstead (1996), and individual level discriminatory factors, Scheepers et al. (2002); Semyonov et al. (2006).

Among economic factors, the studies of Scheve and Slaughter (2001); Dustmann and Preston (2006); Mayda (2006) have shown the existence of a robust negative relationship between an individual's level of education/qualification and anti-immigration attitudes. In these works, the negative relationship between education level and attitude is shown to be due to competition from immigrants in the labor market. However, other scholars e.g. Citrin et al. (1997) and Fetzer (2000) suggest that this relationship may simply reflect a high level of tolerance, greater openness to cultural diversity and better information on the economic benefits of immigration among people who are better educated compared to others. Studies also suggest that economic conditions in a country influence attitudes towards foreign workers. In particular, during economic downturns migrants are seen as a competitive threat due to greater labor market competition, Semyonov et al. (2006); Gorodzeisky and Semyonov (2009). In addition to income and the education level, empirical studies consider other control variables that could explain the anti-sentiment towards immigration.

A number of studies have shown that unemployed people are less in favor of immigration, Hanson et al. (2007); Malchow-Møller and Skaksen (2008); Gorodzeisky and Semyonov (2009). Hainmueller and Hiscox (2007) show that skilled and unskilled respondents are favorable towards high-skilled immigrants but not towards low-skilled immigrants. This result goes against the theory of competition in the labor market, which predicts that natives would not be in favor of immigrants with comparable levels of education, and emphasize the role of non-economic factors in anti-immigrant sentiment.

Studies show that the number of migrants or ‘out-group’ population is a source of perceived competition, Scheepers et al. (2002); Semyonov et al. (2006); Gorodzeisky and Semyonov (2009). The reasoning underlying this is that the larger the ‘out-group, the larger the competition for scarce resources. Arguing along the same lines, the studies of Citrin et al. (1997); Dustmann and Preston (2007); Hanson and al. (2007); Facchini and Mayda (2009) examine the link between citizens' perceptions of the impact of immigration on public finances and attitudes towards immigrants. The majority of these authors argue that the alleged negative effect of immigration on public finances plays an important role in anti-immigration sentiment. The model of Dustmann and Preston (2007) which takes into account three variables in determining anti-immigrant feelings: labor market factors, welfare factors, and racial attitudes find that all three variables affect attitudes towards migrants, but that race plays an important role in particular for the lower educated.

Other studies show that non-economic factors such as social and political alienation are much more important compared to economic factors, e.g. Espenshade and Hempstead (1996). The same holds for individuals at the extreme right of the political spectrum as well as older people and those in rural areas, Mayda (2006); Miguet (2008); Malchow-Møller and Skaksen (2008). Some studies find that apprehensions with regard to identity, Mayda (2006) and ideology, Scheve and Slaughter (2001), influence attitudes towards migration.

Studies also show that socio-demographic factors influence attitudes towards migrants. The studies of Daniels and Von der Ruhr (2003) suggest that people who declare themselves to be religious, as well as immigrants and foreign nationals are more in favor of immigration. However, studies have not provided clear-cut answers as to whether there are differences between women and men in their attitudes towards immigration. Mayda (2006); Malchow-Møller and Skaksen (2008); Gorodzeisky Semyonov (2009) suggest that women are more adverse towards immigration compared to their male counterparts. Others, on the contrary, conclude that there is no significant difference between women and men in their attitudes towards immigration, e.g. Bauer et al. (2000).

While our study is closely related to the aforementioned literature, in particular, that of Mayda (2006) who takes into account economic and non-economic factors in we extend upon the Mayda study in the following ways. While Mayda (2006) investigates factors which influence responses to the questions: “Do you think the number of immigrants to [respondent’s country] nowadays should be: (a) reduced a lot, (b) reduced a little, (c) remain the same as it is, (d) increased a little, or (e) increased a lot”, “How about people from other countries coming here

to work. Which one of the following do you think the government should do? (a) Let anyone come who wants to? (b) Let people come as long as there are jobs available? (c) Place strict limits on the number of foreigners who can come here? (d) Prohibit people coming here from other countries?”, we investigate responses to the question of “whether priority should be given to the nationals of a country rather than immigrants when jobs are *scarce*.” Our focus therefore as opposed to Mayda (2006), is on discrimination towards migrants in the labor market rather than migration policy. Our study additionally captures a larger number of countries.

4. Data

For the empirical analysis, the individual-level data are drawn from the most recent World Value Survey (Wave 6), undertaken in 53 countries plus Hong Kong the Special Administrative Region of the People's Republic of China. The interviews were conducted between 2010 and 2014. The countries covered by WVS wave 6 are: Armenia, Australia, Azerbaijan, Bahrain, Brazil, Belarus, Chile, China, Colombia, Cyprus, Ecuador, Egypt, Estonia, Georgia, Germany, Ghana, Hong Kong*, India, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Libya, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Nigeria, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Russia, Rwanda, Singapore, Slovenia, South Africa, South Korea, Spain, Sweden, Taiwan, Thailand, Trinidad and Tobago, Turkey, Ukraine, United States, Uruguay, Uzbekistan, Yemen, and Zimbabwe. The sampling universe consists of individuals over the age of sixteen. The countries' data for this nationally representative survey were pooled into one dataset containing information on 78,743 respondents.

The large empirical literature that has studied the determinants of individual attitudes towards immigration focuses mainly on developed countries, see, for example, Citrin and Side (2008). The developing countries have not received much attention on this issue. This limitation is principally due in part, to the deficit of the dataset that captures public opinion on immigration in these countries. However, a few notable exceptions exist. For example, the study on individual attitudes towards immigration in South Africa by Facchini et al. (2013) and the Mayda (2006) study includes among the sample composed of Western countries one developing country, namely Philippines. The world value survey sample offers the opportunity to consider countries that vary in terms of stages of development and other aspects such as their geographical location (Africa, Asia, Europe, Northern and Latin

America, and Oceania).

The Dependent variable

In this analysis we are interested in individuals' preference for discrimination against immigrants in hiring. For this we used the question, "*when jobs are scarce, should employers give priority to people of the country of origin rather than immigrants?*", as our dependent variable. The answers to this question were coded 1 if the answer was 'yes' and 0 if the answer was 'no.'

Control variables

As mentioned above, we use a number of control variables to capture economic, socio-demographic and individual level characteristics in the empirical analysis which have been identified as relevant based on the related empirical literature. A robust finding in this literature is that negative attitudes towards immigration are much stronger among individuals who are older, less-educated, as well as those who place themselves more to the right on the ideological scale, e.g. Scheve and Slaughter (2001); Citrin et al. (1997); Mayda (2006); Sides and Citrin (2007); Malchow-Møller and Skaksen (2008).

A number of studies have also shown that unemployed people are less in favor of immigration, e.g. Hanson, Scheve and Slaughter (2007); Malchow-Møller and Skaksen (2008); Gorodzeisky and Semyonov (2009). One might also expect an individual who worries about losing their job to express a high level of immigration phobia. In contrast, immigrants and those with foreign backgrounds tend to have more positive attitudes towards immigration relative to native-born, e.g. Sides and Citrin (2007); Scheve and Slaughter (2001). The same holds for those who live in rural areas, e.g. Mayda (2006); Malchow-Møller and Skaksen (2008).

Hence, our empirical model includes the individuals age, educational attainment, employment status, the size of the city in which he/she lives, his/her ideological preference measured through self-placement along the standard 10-point left–right scale, the household income and the degree of satisfaction with the financial situation of the household.

The regressions also included a set of variables to control for respondent characteristics which include: gender, whether the respondent is an immigrant or not, national citizen of the country or not and whether his/her parents are immigrants and his/her religiosity, operationalized by three dichotomous variables. The first is equal to 1 if the respondent belongs to a particular

religion or denomination and 0 otherwise. The second set equals 1 if he/she considers religion to be important and the third is equals 1 if he/she considers that the only acceptable religion is his/her religion.

We also control for individual level characteristics which are classified as racist attitudes in Mayda (2006) or psychological attitudes in Citrin and Sides (2008); Hainmueller and Hopkins (2014) in the regressions. These include answers to questions by respondents as to whether or not they would like to have immigrants as neighbors, and not trust people of another nationality and religion, and to be more in favor of discrimination against immigrants in hiring. Table 1A in the appendix provides a summary of the variables used in the empirical analysis and how they were coded.

5. Empirical Strategy and Results

To measure the association between the different control variables and individual preferences for discrimination against immigrant in hiring, we use both micro level and macro level data. One approach that enables us to address concerns regarding the use of both types of data is a multi-level modeling methodology. This takes into account the hierarchical nature of the data, that is, the clustering of data within groups¹⁰. Here, individuals from the same groups, for example, citizens' vs immigrants, are likely to have similar preferences and therefore be clustered within these groups. A methodology that does not take this into account the intra-group correlation could underestimate the standard error of the regression coefficients of the aggregate variables, Steenbergen and Jones (2002). Therefore, we use a multi-level approach in order to account for this. The signs of the estimated coefficients indicate the direction of the relationship between the dependent and the explanatory variables, but given that the model is non-linear, the magnitude of the coefficients is not directly interpretable. To ease the interpretation of the estimation results we compute the marginal effects of the explanatory variables for the final model¹¹. Table 1 reports the regressions results and the marginal effects.

Overall, the majority of the variables considered are statistically significant at the 1% level and move in the theoretically expected direction. More precisely, we find a positive and statistically significant association between the dependent variable and the variables age

¹⁰ We estimated a random slope model that allows the relationship between the explanatory variables and the dependent variable to be different for each group.

¹¹ For a continuous variable the marginal effect represents the change in predicted probability of a being pro discrimination against immigrants resulting from an instantaneous change in this variable. For a binary variable, the marginal effect indicates the change in the predicted probability of being pro against discrimination in hiring when the variable changes from zero to one. For a discrete variable of more than two possible values, the marginal effects show the difference in the predicted probabilities for cases in one category relative to the reference category.

measured in years and self-placement on the ideological left-right scale. In contrast, as expected, education¹², household income and satisfaction with financial situation of the household have negative effects. These findings indicate that the preference of discrimination against immigrants in hiring is much stronger among individuals who are older, have relatively lower educational levels, and living in relatively low-income households. The same holds for individuals who are less satisfied with the financial situation of their household income and those who place themselves more to the right on the ideological scale.

As was expected, the regression results show that immigrants are less likely to be in favor of discrimination against immigrants. This result is in line with other studies that find that immigrants tend to hold more positive attitudes towards immigration relative to native-born, for example the studies of Sides and Citrin (2007), Scheve and Slaughter (2001). The results also show that being of foreign background (person whose parents are immigrants) decreases the probability of being in favor of this form of discrimination against immigrants. The marginal effects (equation 5) indicate that being immigrant and coming from a multicultural background decrease, respectively, by 9.7%, and 5.9% the probability of having a preference for employers discriminate against immigrants' workers in hiring.

The regressions results also reveal that being a woman reduces the probability of being in favor of discrimination by 2.5%. One explanation for this result could be that given the fact that relative to men, women are more likely to experience different forms of discriminations in labor market and therefore would less likely be in favor of discrimination against immigrants in the labor market compared to men.

Contrary to what was expected, unemployed and self-employed individuals do not have a higher or lower probability of being pro-discriminatory towards immigrants. However, the feeling of job insecurity captured by possibility of job loss leads to an increase in the probability of having a preference for this form of discrimination by 5.8%.

Another interesting result is that, compared to non-religious persons, those who are religious have a higher probability of being in favor of discrimination against immigrants in employment. However, this effect is statically significant only at the 10% level and is not robust when other factors are controlled for, so it was dropped from the final model¹³. But the

¹² Although, once accounting for other factors, the variable education became statistically insignificant, so she was dropped in the final model.

¹³ We should note that the empirical literature is not clear-cut on the relationship between religiosity and attitudes towards immigration. Some empirical findings indicate that this relation is positive. Others reach mixed conclusions, for example, Ben-Num Bloom et al. (2015) argue that religiosity may either reduce or exacerbate immigration sentiments, depending on

belief that religion is important and that the only acceptable religion is the respondents own religion appears to be an important predictor of the individuals' preference for discrimination against immigrants in hiring. These beliefs increase, respectively, by 3.1%, and 1.9% the probability of being in favor of this form of discrimination.

Moreover, a priori, we expected that the taste of discrimination against immigrants in employment to be driven by intolerance and immigration phobia considerations. More precisely, consistent with our predictions our results indicate that the preference for discrimination against immigrant in hiring is more likely to come from persons who would not like to have immigrants or foreigners as neighbors. Wishing not have immigrants as neighbors leads to an increase in the probability of being in favor of discrimination against immigrants in hiring by 4.9%. The regressions results also show that the trust in people of another nationality and people of other religions decrease the probability of being in favor of discriminatory practice towards immigrants in employment by respectively, 4.9%, and 2.1%.

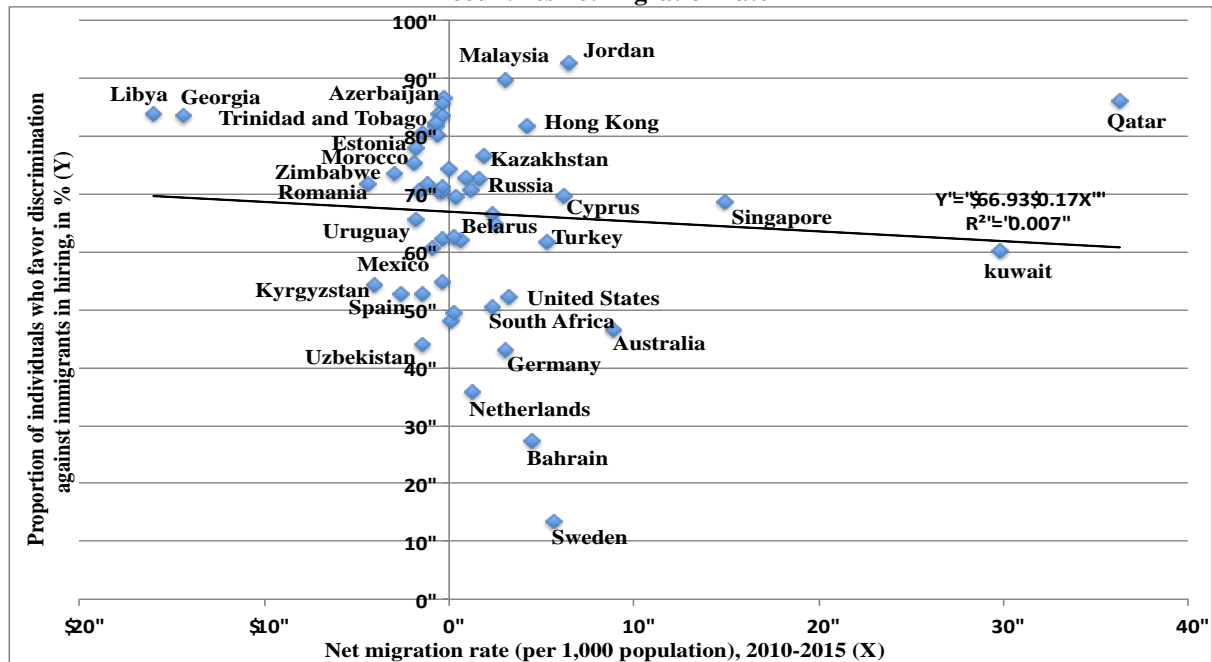
Finally, we find a strong association between the size of the town where the individual lives and his preference for discrimination against immigrants in hiring. The positive sign associated with the city size indicates that persons who reside in bigger cities are more likely to be in favor of this form of discrimination.

It is striking that individuals' preference for discrimination against immigrants in hiring is much stronger in the countries experiencing a negative net migration rates with more people leaving the country than entering it such as Mexico, Morocco and Trinidad and Tobago than in countries of immigration characterized by positive net migration rates such as Australia, Germany, and Kuwait. However, Figure 3 shows a weak negative relationship between the net migration rates of countries and individuals taste for discrimination in employment. Therefore the question arises as to whether net migration rates as a contextual factor have an influence on individuals' preferences for discrimination against immigrant in hiring after controlling for individuals characteristics. To answer this question, the multilevel modeling used and the results reported in Table 1 suggest that an increase in net migration rate is associated with lower individuals taste for this form of discrimination¹⁴.

the dimension of religiosity considered as well as the similarities and/or differences between immigrants and natives. For an excellent review of this literature, see Ben-Num Bloom et al. (2015).

¹⁴ We also tested for the effect of the countries unemployment rate and gross national income per capita, used as a proxy for the countries development level (the results are not reported in Table 1). Given that the impact of these variables was not significant, we can conclude that overall, the individuals' context has no effect on their taste for discrimination against immigrants in hiring.

Figure 3- Proportion of Individuals Who Favor Discrimination against Immigrants in Hiring (in %) and countries net migration rate



Source: World value survey for the proportion of individuals who favor discrimination against immigrants and United Nations for net migration rate.

In other words, our results suggest that countries with relatively high immigration levels have more positive attitudes towards immigrants. For example, countries such as Australia, Bahrain, Germany, United States and Sweden. In contrast, in countries like Azerbaijan, Estonia, Mexico, Uruguay and Zimbabwe with low immigration, anti-immigrant attitudes are much stronger. This result may at first appear counterintuitive, since, as one might expect citizens who live in countries with a smaller proportion of emigrants to have in general less negative attitudes towards emigrants. The intergroup contact theory, developed by Allport (1954), provides an explanation for this. According to this theory contact between majority and minority group members reduce prejudice toward minority group members. Based on this theory greater contact with immigrants reduce anti-immigrant sentiments and discrimination, see, for example, Pettigrew (1998); Fussell (2014). We should therefore expect citizens of countries with smaller immigrant populations to have less contact with immigrants, leading to greater opposition to immigration. In contrast, in countries with relatively large immigration populations there is greater likelihood of intergroup contact leading to lower threat perceptions and prejudice against immigrants. Similarly, given that the presence of immigrants in countries characterized by higher migration rates is not a new phenomenon, it is possible that these countries are more openness to immigration and have lower negative attitudes towards immigrants.

Table 1 – Multilevel Logit Regression Models Predicting the Effects of Individuals' and Countries control variables on the Probability of being in favor of preference for discrimination against Immigrants in hiring

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5
Individual-level controls					
Woman	-0.139*** (0.020)	-0.124*** (0.021)	-0.120*** (0.024)	-0.129*** (0.024)	-0.125*** (0.024) [-0.025***]
Immigrant		-0.468*** (0.054)	-0.531*** (0.063)	-0.477*** (0.066)	-0.491*** (0.065) [-0.097***]
Both parents are immigrants		-0.282*** (0.051)	-0.305*** (0.058)	-0.316*** (0.060)	-0.299*** (0.059) [-0.059***]
Age	0.005*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001)	0.006*** (0.001) [0.001***]
Education	-0.017*** (0.005)	-0.0169*** (0.005)	-0.010*(0.006)	-0.002 (0.006)	
Size of town of residence	0.010** (0.005)	0.006 (0.005)	0.014** (0.006)	0.019*** (0.006)	0.016*** (0.006) [0.003***]
Unemployed	-0.036 (0.034)	-0.046 (0.035)	-0.054(0.039)	-0.050 (0.040)	
Worried about losing job	0.340*** (0.023)	0.396*** (0.024)	0.303*** (0.028)	0.294*** (0.028)	0.295*** (0.028) [0.058***]
Self-employed	0.040 (0.032)	0.043 (0.033)	0.056 (0.036)	0.057 (0.037)	
Household income	-0.066*** (0.005)	-0.063*** (0.005)	-0.059*** (0.006)	-0.059*** (0.006)	-0.059*** (0.006) [-0.012***]
Satisfaction with financial situation of household			-0.027*** (0.005)	-0.023*** (0.005)	-0.023*** (0.005) [-0.004***]
Self-placement on the ideological left-right scale			0.015*** (0.005)	0.015*** (0.005)	0.016*** (0.005)

(Continued)

Table 1 - Continued

	Equation 1	Equation 2	Equation 3	Equation 4	Equation 5
Religious			0.051*(0.030)	0.057* (0.031)	
Considers that religion is important			0.105*** (0.033)	0.148*** (0.034)	0.157*** (0.031) [0.031***]
Considers that only acceptable religion is his/her religion			0.118*** (0.026)	0.094*** (0.027)	0.099*** (0.026) [0.019***]
Would not like to have immigrants or foreigners as neighbors		0.298*** (0.026)	0.277*** (0.029)	0.249*** (0.030)	0.253*** (0.030) [0.049***]
Trusts people of other nationality				-0.245*** (0.033)	-0.254*** (0.033) [-0.049***]
Trusts people of other religion				-0.115*** (0.033)	-0.108*** (0.032) [-0.021***]
Country-level control					
Net migration rate	-0.052 (0.046)	-0.051 (0.054)	-0.083* (0.048)	-0.078* (0.046)	-0.080* (0.046) [-0.015*]
Constant	0.335*** (0.120)	0.326*** (0.017)	0.514*** (0.129)	0.551*** (0.135)	0.542*** (0.099)
Variance of random slope	0.797*** (0.101)	0.698*** (0.095)	0.019 (0.090)	0.015 (0.015)	0.015 (0.015)
Variance of random intercept	0.0235 (0.015)	0.0311* (0.123)	0.283*** (0.015)	0.308*** (0.103)	0.304*** (0.126)
Number of observations	53,091	49,022	37,746	36,104	37,330
Number of groups	41	38	37	36	37

Note: Entries are coefficients, standard errors in parentheses and the marginal effects in brackets. * Significant at 10% level, ** Significant at 5% level, and *** Significant at 1% level.

6. Conclusions and discussion

In this study, we have examined the determinants of individuals' preference for discrimination against immigrants in hiring using the last wave of the most recent Wave of World Values Survey (WVS), fielded in 53 countries (plus Hong Kong) that vary in terms of stage of development and other aspects such as their geographical location (Africa, Asia, Europe, Northern and Latin America, and Oceania). We have attempted to contribute to the literature by investigating attitudes towards migrants during periods in which jobs are scarce, thus contributing to the literature on discrimination towards migrants in the labor market.

These findings suggest that the preference for discrimination against immigrants in hiring is stronger among individuals who are older, have relatively lower educational levels, and come from relatively low-income households. Immigrants and women are less likely to be in favor of discrimination against immigrants in the labor market. Those who believe that their religion is the only religion and claim to be more religious are less accepting of migrants during periods in which jobs are scarce. The same holds for individuals who are less satisfied with the financial situation of their household income and those who place themselves more to the right on the ideological scale. Similarly, those who are less tolerant of migrants or have a psychological fear of them are more likely to be hostile towards migrants during periods in which jobs are scarce. Town size also matters.

These results suggest that not only economic, but also socio-demographic, political and individual level characteristics play an important role when it comes to migrants been given jobs during periods in which jobs are scarce. The policy implications stemming from these results are that factors not related to worker productivity. Non-economic factors also affect labor market decisions, in particular, during periods in which an economy is facing a downturn. Thus, discrimination represents a barrier to the full integration of immigrants. This makes the implementation of policy more difficult, as policy makers need to take into consideration not merely economic factors but a host of other factors.

Beyond these considerations we argue that public policy makers and stakeholders should see discrimination against immigrants in hiring not only as an obstacle to their economic and social integration but also as a major public health issue. Indeed, a large body of literature focusing on various population groups, e.g. African-American, Asian-American, immigrants, have consistently found that perception of different forms of discrimination is associated with poorer health outcomes. All these studies show that self-reported experiences of

discrimination affect a person's mental and physical health such as anxiety, depression, and heart disease, Pernice and Brook (2010); Gee et al. (2007); Agudelo-Suarez et al. (2009). For a review of this literature see Pascoe and Richman (2009). A study co-authored by Elizabeth Blackburn¹⁵, laureate of Nobel Prize in Physiology/Medicine has also found strong evidence that discrimination accelerates biological aging among African-American men. Consequently, governments' efforts to combat discrimination against immigration in employment to achieve equal opportunities for all may reduce the adverse effects of discrimination on the health of a population.

How can stakeholders and policy makers reduce discrimination against immigrants in terms of access to employment? We do believe that better public access to information on the effects of immigration on employment would reduce individuals' fear of immigration and help reduce discrimination against immigrants.

Surprisingly, despite the fact that several studies provide empirical evidence on immigrants taking native workers' jobs, studies also find that immigrants stimulate job creation and even provide opportunities for native workers to upgrade their occupations and specialize in higher-skill jobs,¹⁶ different surveys reveal that a notable proportion of the public believe that immigrants take natives jobs. For instance, data from the immigration module of the European Social Survey (ESS) fielded, between 2014 and 2015, reveals that over 35% of the respondents in Belgium (38%), Austria (39%) and Portugal (40%), Poland (41%) share this opinion. It is remarkable to see that this proportion is much higher in countries such as the Czech Republic (64%) and Hungary (61%) where the immigrants represent small minorities. In contrast, it does not exceed 11% in Sweden, 14% in Norway and 18% in Germany where the immigrants represent a significant share of the total population.

This misperception is based on the idea that the total number of jobs in an economy remains fixed. This causes many to think that the entry of immigrants into the labor market suggests a reduction in employment prospects for natives workers. The problem with this reasoning is that it considers only the supply side, ignoring the demand side. Indeed, as consumers of national goods and services, immigrants also contribute to job creation. Moreover, some as entrepreneurs create their own jobs and generate jobs for natives' workers. For instance, in OECD countries, around 13% of foreign-born workers are self-employed and this proportion

¹⁵ Chae, D.H., A.M. Nuru-Jeter, N.E. Adler, G.H. Brody, J. Lin, E.H. Blackburn and E.S. Epel (2014), "Discrimination, Racial Bias, and Telomere Length in African-American Men", *American Journal of Preventive Medicine*, Vol. 46(2), pp. 103–111.

¹⁶ For a discussion of the impact of the immigration on labor market see Constant (2014): <https://wol.iza.org/uploads/articles/10/pdfs/do-migrants-take-the-jobs-of-native-workers.pdf> ((accessed March 2017).

is much higher in countries such as Italy (15%), Hungary (18%), Slovak Republic (22%), Czech Republic (24%), and Poland (30%)¹⁷.

The intergroup contact theory, developed by Allport (1954), provides an explanation for this. According to this theory contact between majority and minority group members reduces prejudice toward minority group members. Based on this theory, a higher degree of contact with immigrants reduces anti-immigrant sentiments, and discrimination, see, for example, Pettigrew (1998); Fussell (2014). Therefore, according to this theory, the smaller the immigrant group in a country, it reduces the likelihood of contact, leading to greater opposition in favor of immigration. In contrast, a relatively large immigrant population in a host country increases the likelihood of intergroup contact leading to lower threat perceptions and prejudice towards immigrants. In addition, given that the presence of immigrants in the countries characterized by a positive migration rate is not a new phenomenon and are more openness to immigration and lower negative attitudes towards immigrants.

According to a study undertaken by the OECD and the European commission (2015) integration is also a process that takes place over time. As the duration of the stay increases, immigrants become more familiar with the host country way of life and differences between immigrants and natives narrows over time. Outcomes are narrower for immigrants who have lived in the host country for at least ten years. Liebig and Huddleston (2014) find that in European OECD countries, each an additional year of stay is related to higher immigrant employment rates and lower rates of over-qualification.

Limitations of this study include the use of a cross-sectional approach, which does not allow drawing conclusions on the causal effects of the control variables. Therefore, the observed relationships should be interpreted as correlations. Additionally, because the WVS does not include questions that capture individuals' opinion on immigration and its perceived impact particularly on native-born workers employment opportunities, we are not able to empirically test whether these factors also predict individuals' preference for discrimination against immigrants in employment. Nonetheless, despite these shortcomings, we do believe that this study has made an important contribution to the literature investigating factors which influence preferences for discrimination against immigrants in access to employment during periods in which jobs are scarce and what factors might be causing the persistently higher levels of unemployment among immigrants.

¹⁷ See Entrepreneurship at a Glance 2013: http://www.oecd-ilibrary.org/industry-and-services/entrepreneurship-at-a-glance-2013/self-employment-rates-of-migrants_entrepreneur_aag-2013-22-en (accessed March 2017).

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Appendix: Table 1A Descriptive Statistics

Variable	Description
When jobs are scarce, employers should give priority to people of this country over immigrants.	Equals 1 if the respondent agrees with the statement and 0 otherwise.
Women	Sex of respondent (Female=1, Male=0)
Unemployed	Equals 1 if the respondent is unemployed and 0 otherwise.
Self Employed	Equals 1 if the respondent is self-employed and 0 otherwise.
Individual satisfaction with household income	Ranges from 1 and 10, with 1= completely dissatisfied and 10= completely satisfied
Individual household income	Ranges from 1 and 10, with 1= the lowest income group and 10=the highest income group.
Immigrant	1= If respondent is himself an immigrant, 0 = If respondent is not an immigrant.
Both Parents Immigrants	Equals 1 if both parents of the respondent are immigrants and 0 otherwise.
Would not like to have as neighbors: Immigrants or foreign workers	Equals 1 if the respondent declared yes and 0 otherwise.
Trusts people of other nationality	Equal 1 if the respondent trusts people of other nationality and 0 if he/she, does not trust.
Trusts people of other religion	Equal 1 if the respondent trusts people of other religion and 0 if he/she, does not trust.
Education	1=If the respondent has no formal education 2= If the respondent has incomplete primary school education 3= If the respondent has completed primary school 4= If the respondent has incomplete secondary school education: technical/ vocational type 5= If respondent has completed secondary school: technical/ vocational type 6= If respondent has incomplete secondary school education: university-preparatory type 7= If respondent has completed secondary school: university-preparatory type 8= If respondent has some university-level education, without degree 9= If respondent has university - level education, with degree
Size of Town	The size of town where the respondent lives 1=If size is under 2,000 2= If size is between 2,000-5,000 3= If size is between 5,000-10,000 4= If size is between 10,000-20,000 5= If size is between 20,000-50,000 6= If size is between 50,000-100,000 7= If size is between 100,000-500,000 8= If size is between 500,000 and more
Immigrant	1= If the respondent is himself an immigrant, 0= otherwise.
Religious person	Equal 1= if the individual is a religious and 0 otherwise.
Considers that religion is important	Equal 1 if religion is very important for the respondent and otherwise.
Considers the only acceptable religion is his/her religion	Equal to 1 if the respondent agree with this statement and 0 if he/she, disagree.
Net migration rate	Net immigration rate (per 1,000 population), 2010-2015.