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**Eva Zschirnt, Giuliano Bonoli,  
Flavia Fossati**

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**Why Do Employers Sometimes  
Prefer Minority Candidates?  
Theoretical Review and Empirical Test**

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**Eva Zschirnt (University of Wuppertal),  
Giuliano Bonoli, Flavia Fossati  
(University of Lausanne)**

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# **Why Do Employers Sometimes Prefer Minority Candidates? Theoretical Review and Empirical Test**

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nccr – on the move, University of Neuchâtel, Rue Abram-Louis-Breguet 2, 2000 Neuchâtel, Switzerland  
Contact for the Working Paper Series: [info@nccr-onthemove.ch](mailto:info@nccr-onthemove.ch)

## Abstract

Correspondence tests on ethnic discrimination in the labor market usually focus on how often native majority candidates and ethnic minority candidates are invited for job interviews on an aggregated level. Cases in which only minority candidates are invited for an interview have mostly been disregarded as noise and not analyzed further. In this paper, we argue that employers who prefer minority over majority candidates may have good reasons to do so. We propose several theoretical mechanisms that explain why it would be desirable to hire individuals with a non-native background and test these expectations quantitatively with correspondence test data that was collected in Switzerland between October 2017 and December 2018. We find partial support for our expectations: in particular, in urban and thus likely more international firm settings; and among owners doing the recruitment themselves in the context of small enterprises, where close supervision is possible, we identified employers who are more willing to “take the risk” and to invite only minority applicants for a job interview. We argue that employer behavior is likely to be complex and that research should analyze instances of minority preferences more systematically.

## Keywords

Discrimination, minority preference, job applications, correspondence testing, labor market

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## Contacts

[zschirnt@uni-wuppertal.de](mailto:zschirnt@uni-wuppertal.de)

School of Humanities and Social Sciences, University of Wuppertal, Gaußstraße 20, 42119 Wuppertal, Germany

and European University Institute, Via dei Roccettini 9, 50014 San Domenico di Fiesole, Italy

[giuliano.bonoli@unil.ch](mailto:giuliano.bonoli@unil.ch), [flavia.fossati@unil.ch](mailto:flavia.fossati@unil.ch)

University of Lausanne, Bâtiment IDHEAP, Rue de la Mouline 28, 1015 Lausanne

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# 1 Introduction

A large corpus of research suggests that labor market discrimination against ethnic minorities is highly pervasive in Western labor markets.<sup>1</sup> Using correspondence testing as a method, this strand of research has highlighted that, all else being equal, members of ethnic minorities are less likely to be invited to job interviews relative to members of the majority and nearly all published studies find a significant effect related to minority status (e.g., Bertrand and Mullainathan 2004, Kaas and Manger 2012, Quillian et al. 2019). Recent meta-analyses of correspondence tests have confirmed the findings that discrimination against ethnic or racial minority candidates occurs across time and countries studied (Zschirnt and Ruedin 2016, Quillian et al. 2017 and 2019). There are, however, at least two limitations with these studies: first, as acknowledged in the meta-analyses, there is a problem of publication bias. Second, as Neumark and Rich (2016) cautioned, field experiments might overstate the extent of discrimination due to unobservable characteristics of applicants and their productivity.

Next to this prevalence of discrimination against minority candidates, this literature has produced another consistent finding, which, however, has attracted little attention so far. In the majority of the available correspondence studies, researchers have observed a relatively small number of instances in which the minority candidate is preferred to the majority applicant. We call these “instances of minority preference”. Meta-analyses suggest that the prevalence of these instances amounts to an average of 4-8% of all individual tests (e.g., Zschirnt and Ruedin 2016, Bonoli and Fossati 2018).

How do researchers explain these instances of minority preference? In effect, in the vast majority of correspondence tests, on an aggregated level researchers consider these cases as “noise” and do not discuss them at all (Bonoli and Fossati 2018). In other words, they assume that instances of minority preference are randomly distributed outcomes that may be caused by mistakes by the recruiter, the order in which applications are considered, or other random factors (e.g., the number of minority workers already employed by the firm). In line with this theoretical approach, many studies simply subtract the number of cases where employers prefer minority candidates from the number of instances in which only the majority candidate is invited to produce a “net discrimination rate” (first used by McIntosh and Smith (1974) and recommended by Bovenkerk (1992) for the ILO testing, for a discussion see Heckman and Siegelman (1993), and Riach and Rich (2002)).

There are, nonetheless, reasons to believe that instances of minority preference are not randomly distributed and can, at least in part, be explained. First, qualitative studies of recruitment have shown the existence of employers who actively seek minority members. This is often the case for low skilled, unattractive jobs, such as in the hotel industry (Zamudio and Lichter 2008), the fishing industry (Friberg and Midtbøen 2018), and other low skilled occupations (Moss and Tilly 2001, Bonoli and Hinrichs 2012). Employers motivate their preference for minority candidates by arguing that these employees tend to be more tractable, that is, they are less likely to complain and are more motivated than natives in jobs with a low social standing. Second, preliminary results suggest that instances of minority preference are context-dependent.

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<sup>1</sup> Recently studies have also shown similar trends in non-Western countries, e.g. Malaysia (Lee and Khalid 2016).

With this paper, we take this line of research a step further and ask how instances of minority preference can be explained. We believe that there are two broad groups of explanations that apply to this phenomenon. First, some employers may have an explicit preference for diversity. This can be the case of firms that are consciously trying to increase the proportion of ethnic minority members in their workforce, for example, to reflect the ethnic diversity of their clients or to emphasize that they are modern and diversity-friendly employers (e.g., Kalev et al. 2006, Rivera 2012a). Alternatively, it could be the case that recruiters who belong to an ethnic minority prefer members of the same minority to members of the majorities (Tilly 1990).

The second set of explanations draws on labor market segmentation and marginalization theories (e.g., Piore 1979, Waldinger and Lichter 2003, Aasland and Tyldum 2016). It considers the fact of being a potential victim of discrimination as a desirable feature, basically because this status is associated with fewer job opportunities in the general labor market. Employers may anticipate that employees with fewer alternatives may be more loyal, tractable, and productive at any given wage level (Zamudio and Lichter 2008). These are qualities highly valued by employers and are generally referred to as “motivation” or “having the right attitude” (Moss and Tilly 1996, Shih 2002, Friberg 2012, Callaghan and Thompson 2002). We expect employers to value these qualities especially in contexts in which recruitment is difficult, either because the jobs are unattractive or because of a shortage of applicants.

Analyzing why minority preferences occur, can inform us on the complex nature of discrimination processes. We contribute to this body of research first by developing a theoretical framework capable of accounting for instances of minority preference. Our framework is inspired mostly by theories of discrimination, labor market segmentation, and human resources management. Second, we generate hypotheses with regard to when and why employers may prefer minority candidates. Finally, the theoretical contribution is complemented by an empirical illustration, based on data collected in correspondence tests carried out in Switzerland in 2017–2018. The analysis of the call-backs reveals a non-random distribution of instances of minority preference and patterns. Consistent with our hypotheses we show that minority candidates are more likely to be preferred if firms are located in urban areas or if owners are making the hiring decisions themselves. Furthermore, although these findings are not statistically significant, smaller enterprises seem to be more open towards minority candidates. Our results also indicate that if vacancies specifically mention the requirement of customer contact, full-time, or are in the public sector, it is less likely that only minority candidates are invited for job interviews.

## 2 Theory

Our starting point is discrimination theory and the well-known distinction between taste-based and statistical discrimination that was developed by economists (for discussion of these theories see e.g., Guryan and Charles 2013, Darity and Mason 1998). The theories attribute the occurrence of discrimination to different reasons. First, in the case of *taste-based discrimination*, members of a group are avoided simply because they are disliked (Becker 1957). In this case, what determines discrimination is group-belonging, defined, for instance, in terms of ethnicity. A taste-based explanation of discrimination can reflect the taste of the employers, the fellow employees, and of

their customers (Becker 1957). What matters is that members of the disliked group will be avoided regardless of their productivity and their qualities. In other words, employers are willing to “either pay or forfeit income for [the] privilege [of discriminating]” (Becker 1957, p.14).

In the case of *statistical discrimination*, instead, members of a minority are avoided because of the correlates that are associated with their group belonging. As Phelps argues, “(...) the employer who seeks to maximize expected profit will discriminate against blacks or women if he believes them to be less qualified, reliable, long-term, etc. on the average than whites and men, respectively, and if the cost of gaining information about the individual applicants is excessive” (1972, p.659).

Accordingly, faced with uncertainty with regard to the true qualities of applicants, employers tend to use group membership to proxy information that is otherwise not available or too costly to obtain, to identify the most productive candidates (Phelps 1972, Arrow 1973, Aigner and Cain 1977). In other words, profit-maximizing employers avoid members of given minorities because they believe that their average productivity is lower than that of natives. In the absence of more reliable and accurate information, discriminating employers are likely to exclude members of a given minority.

In contrast to taste-based discrimination, which is due to a subjective distaste for a specific group, statistical discrimination is often regarded as more rational or justifiable as this quote by Bertrand and Duflo (2017, p.312) demonstrates: “While taste-based discrimination is clearly inefficient (simply consider how it constrains the allocation of talent), statistical discrimination is theoretically efficient and, hence, more easily defensible in ethical terms under the utilitarian argument”. In the long run, however, both taste-based as well as statistical discrimination will lead to inefficient decisions in hiring processes.

The distinction between taste-based and statistical discrimination is conceptually clear, but there are several empirical difficulties with this theoretical distinction. First, it is extremely difficult to isolate empirically. Second, Becker’s model does not explain what causes the discriminatory tastes of employers but takes them as a given (e.g., Guryan and Charles 2013). Finally, the source(s) of the information on group averages is unclear: it may include past experience, rumors, and potentially also individual taste-based perceptions, meaning that statistical-based discrimination may be intertwined with taste-based elements.

The distinction between taste-based and statistical discrimination is less relevant in psychology, which focuses mostly on prejudices on the one hand, and unconscious and unintentional biases on the other hand. Accordingly, these approaches are interesting starting points to explain where the “taste” for discrimination originates (Bertrand and Duflo 2017).

While discrimination theory aims at explaining instances in which members of a minority are disadvantaged, we believe that the same kind of reasoning can also explain instances of minority preference. Following the distinction between taste-based and statistical discrimination, we identify two different drivers of minority preference. The first of these explains the preference for minority candidates based on their group-belonging. This understanding resembles the taste-based logic of discrimination, which, turned positive, can be used by firms who want to project an image of

openness and modernity by employing a multi-ethnic workforce. In this case, as well as in the other cases we discuss under the label “a preference for diversity”, minority candidates are preferred simply because they belong to a minority, while no inference is made with regard to their productivity.

Alternatively, following the statistical discrimination logic, instances of minority preference can be explained by the fact that belonging to a minority that is discriminated against is associated with qualities that employers may value, such as loyalty, tractability, or commitment. These qualities are intrinsically connected with the fact of having few alternatives on the general job market, because of discrimination. In other words, this reasoning is based on assumed correlates of minority status, and thus resembles the mechanisms that produce statistical discrimination.

In this contribution, we follow the lead of economics and connect our explanations to both taste and statistical discrimination theory. However, our understanding is compatible with a psychology-based view of discrimination being driven by stereotypes. Stereotypes can be either negative or positive, and positive stereotypes can also impact on employers’ decisions. Although ethnic work stereotypes are found throughout modern multicultural societies, they tend to be context-dependent. Moreover, these stereotypes often intersect with gender. For instance, Filipino women have the image of honest and competent domestic workers (Debonneville and Killias 2019), while Polish immigrants in the UK are considered as hard-working and undemanding employees (McVittie and McKinlay 2019).

### 3 A Preference for Diversity

Our first group of hypotheses assumes that some employers want to promote ethnic diversity within their firm. This could explain instances of minority preference such as those we discuss in this paper. In this case, the ethnic minority candidate is preferred precisely because he or she belongs to the minority, and not because of assumed correlates of minority status. In a way, this group of explanations reflects a taste-based understanding of discrimination. However, it is also possible to argue that firms have recognized the advantages of a more diverse workforce, thinking that diversity will make them more competitive by giving them a greater candidate pool, potentially higher productivity, more cultural knowledge, better access to certain markets, or a better public image. These arguments would reflect the perspective of statistical discrimination theory. So why would firms want to promote ethnic diversity?

#### 3.1 Diversity Management

First, the pursuit of ethnic diversity may be part of a larger diversity management strategy, something which is widely supported by management specialists (Nkomo et al. 2019). As Dover et al. (2020, p.155) point out, firms may be driven by several reasons when adopting diversity strategies, driven by (1) a *justice rationale* with the goal of creating a fairer workplace; (2) an *instrumental rationale* aiming to make the workplace more efficient and effective by benefiting from the diversity of staff’s background; or (3) a *signaling rationale*, that shows the firm’s value of diversity to stakeholders, (potential) employees, or the general public. For a firm, it can be

advantageous in terms of general marketing, but also in order to match the ethnic composition of staff and clients. Diversity may not necessarily be a comparative advantage in all markets, but where it is, it may be conducive to hiring decisions in which the minority candidate is preferred to those belonging to the majority. Research on the impact of diversity on performance suggests that there are small but mostly significant effects (Joshi and Roh 2009).

In addition, in increasingly multicultural societies, having a diversity management policy is an asset in terms of recruitment for firms because it increases the pool of potential candidates (Fischer 2009). Firms that are exclusively or predominately staffed by members of the majority, may find it difficult to attract talent among ethnic minorities and immigrants. Thus, firms may intentionally advertise vacancies to make their multi-ethnic quality visible (Perkins and Taylor 2000). More generally, there is evidence that (in the US) high achievers and immigrants prefer to work for ethnically diverse firms (Ng and Burke 2005).

### **3.2 Recruiter's Values**

Second, individual recruiters may hold values that favor ethnic diversity, thus they select candidates accordingly. These values may be congruent with those prevailing within the firm. Evidence that the personal values of the recruiter matter in how candidates are selected is pervasive. Studies focusing on the characteristics of individual recruiters have shown that in many cases the preference goes to candidates who are perceived as more similar to the employer or recruiter (Rivera 2012b), or whose values are perceived as congruent with those of the recruiter (Rynes and Gerhart 1990).

Fritzsche and Oz (2007) show that altruistic values can also play a role in recruitment. More generally, openness to hiring individuals with disabilities, physical or psychological illnesses seems to be influenced primarily by moral/ethical concerns and diversity goals both at the firm and individual recruiter level (Burke et al. 2013, Lengnick-Hall et al. 2008). In the apprenticeship market, recruiters with more egalitarian values were found to be more willing to hire academically weaker candidates (Wilson 2019). Hemingway and Maclagan (2004) argue that room for discretion on the manager's side can influence the implementation of their "personal moral concerns" in a (hiring) decision.

Similarly, it is also likely that political values impact on recruiting decisions. In particular, the literature on public attitudes shows that individuals with conservative and authoritarian attitudes are more skeptical towards ethnic or national minorities and thus might be less likely to hire minority candidates (for an overview see Hainmueller and Hopkins 2014, for hiring discrimination see Carlsson and Eriksson 2017).

Overall, there is substantial evidence that values matter in recruitment and that they can explain why, under some circumstances, the preference could be given to a minority applicant. Whether it is the personal value of the recruiter or a more diffuse notion of "company values" it is difficult to say; because firms differ substantially in terms of company culture, individual recruiters are likely to self-select into firms adhering to similar values.

### 3.3 Ethnic Employers

Third, minority candidates might be preferred in the hiring process by employers or HR personnel who belong to the same ethnic minority. There is a vast literature on ethnic entrepreneurship, suggesting that in this case, minority preferences are highly plausible (for a classic article on segmented labor market theory see Portes and Zhou 1993, for an overview see Zhou 2004). For a variety of reasons, such as, for instance, avoiding experiences of discrimination in the labor market, lacking host country language skills, or lacking alternatives, immigrants resort to opening their own businesses. Unsurprisingly, they are usually overrepresented when it comes to self-employment. Recruitment in these ethnic enterprises often relies on close networks among co-ethnics as well as family ties (Zhou 2004, den Butter et al. 2004). Instances of minority preference in correspondence tests might therefore be driven by ethnic employers making hiring decisions and offering positions to their co-ethnics or other minority members.

Surprisingly, this question has received little attention in correspondence tests, with some notable exceptions. While Carlsson and Rooth (2007) found no correlation between the recruiter's ethnicity and the chance of a minority candidate being invited for a job interview, Booth, Leigh, and Varganova (2012, p.565) found a significant negative effect in Australia regarding Italian employers, who seem to be "less inclined to assist members of the same group". One reason why this has hardly been discussed in the correspondence testing literature could be that the ethnic employers described above, who hire mostly through co-ethnic networks or family ties, are unlikely to advertise vacancies, which could be included in a correspondence test. Furthermore, in many studies, researchers lack detailed information about the recruiters.

## 4 Lack of Alternatives as an Asset

The second group of explanations draws on labor market segmentation and marginalization theories (e.g., Piore 1979, Waldinger and Lichter 2003, Aasland and Tyldum 2016). The basic idea is that the labor market is segmented, in a primary labor market with attractive jobs and a secondary labor market with undesirable occupations. Next to becoming self-employed, as discussed above, immigrant workers, especially newly arrived immigrants, tend to concentrate in the secondary labor market, which is characterized by low-quality jobs natives want to avoid.

Waldinger and Lichter (2003, p.8) use the metaphor of a queue, which follows an ethnic hierarchy. For each level of job quality, employers will first hire among the top ranked group (usually natives), and only when this reservoir is exhausted will they turn to lower ranked groups, first prioritizing established immigrants, then recently arrived immigrants, and so forth. The result of this selection and ranking process is a labor market segmentation that follows ethnic divisions, resulting in different groups of migrants being concentrated in specific sectors and professions.

Why does labor market segmentation occur? The literature provides two main explanations. First, labor market segmentation could be driven by employers, who actively match specific ethnic groups to particular occupations because they are seen as particularly suitable for these positions. In addition, newly arrived immigrants may want to stay only temporarily in the host country and thus

compare the working conditions and wages to those of their country of origin, and as a result accept lower wages and harsher conditions than natives (dual frame of reference, Piore 1979). The second explanation refers to networks and the fact that new immigrants will tend to find employment in the sectors where previous cohorts of immigrants of the same origin are employed. Networks create a self-reinforcing mechanism that produces ethnic segmentation in the labor market, so-called “ethnic niches” (e.g., Portes and Jensen 1989, Friberg and Midtbøen 2018).

Labor market segmentation theory is able to explain instances of minority preference if we assume that segmentation is demand driven, i.e. that employers explicitly prefer minority candidates for given jobs. While our own model is inspired by segmentation theory, it is clearly more ambitious in terms of identifying the possible mechanisms and situations that may lead to the occurrence of instances of minority preference.

#### 4.1 Matching Hierarchies

The first explanation to build on labor market segmentation theory is based on the “matching hierarchies” model of recruitment. It argues that employers are not always looking for the candidate with the best fit in terms of qualification, personality, and experience (Auer et al. 2019). Rather, this model assumes the existence of hierarchies, regarding both candidates and jobs. Candidates are ranked according to objective and strictly productivity-related factors (e.g., educational credentials, work experience), and in terms of other characteristics that are associated with productivity only in probabilistic terms (e.g., age and ethnicity). At the top of the hierarchy, we find young, educated native people who are in employment, while at the bottom we are likely to find older, low skilled immigrants who have been unemployed for some time. This hierarchy can also be conceptualized as a “queue”, with those at the front filling the first vacancies, and those who follow having to wait until they are at the front of the queue before they find a job (Waldinger and Lichter 2003).

Similarly, jobs are ranked in terms of desirability (e.g., wage, working conditions, and social standing). The matching hierarchies model assumes that employers will not necessarily recruit the best candidate for each vacancy, but will match jobs and candidates who are at a similar level in their respective hierarchy. This means that, for low desirability jobs, employers will prefer low-ranked candidates to higher-ranked ones. This idea is well illustrated in a quote from an interview with the owner of a laundry:

*“People who don’t have any ‘problems’ don’t want to work in a laundry. (...). The task is not very rewarding and has a bad image. Employees with problems and difficulties, or people with migration background, they don’t mind working in a laundry. It’s hard to hire other people. You can really only resort to people with employment problems.”*  
(Bonoli and Hinrichs 2012, p.351).

Qualitative studies largely support the notion that employers prefer immigrants for unattractive and undesirable jobs, either because these positions are avoided by natives (e.g., Piore 1979, Moss and Tilly 2001, Waldinger and Lichter 2003, Faist 1994, Friberg and Mitbøen 2018), or because

employers are used to members of particular minorities carrying out specific tasks (Stewart and Perlow 2001, p.266)<sup>2</sup>.

But what are the reasons that render immigrants attractive for low-quality jobs and what distinguishes the position of different groups of immigrants in the ethnic hierarchy? We argue that the very fact of being discriminated against is the main quality making immigrants attractive employees. In fact, natives strive to preserve their position in the social hierarchy by avoiding jobs that are associated with a lower wage, prestige, and/or are more difficult, dangerous, and dirty (so-called 3D jobs; Mori 1997). On the contrary, minority candidates, who know they are more likely to suffer from discrimination on the general labor market, may be more willing to accept less desirable jobs because they anticipate difficulties in finding a job in the first place. Strategic employers may take advantage of this difficulty and hire minority candidates in order to secure more loyal and tractable employees, particularly for low-quality jobs (Bonoli and Fossati 2018).

## 4.2 Efficiency Wage

The second reason why an employer might prefer hiring a minority candidate lies in efficiency wage theory, which predicts that under certain circumstances it can be efficient for firms to pay above market wages. A central element of the theory is the expectation that labor contracts are imperfect. The main bargaining power of employees is their level of commitment: highly motivated employees are likely to be more productive than those who withhold some of their effort (i.e. shirk their duties) (Offe and Hinrichs 1985). It is further argued that by paying higher than average wages (so-called efficiency wages), employers can limit shirking behavior, since employees who get caught and dismissed for shirking, are likely facing a wage loss even if they quickly find a new position under full employment (Shapiro and Stiglitz 1984). The portion of the wage that exceeds the market clearing rate functions as a gift, which generates an obligation among workers to reciprocate the employer in the shape of higher productivity (Akerlof 1982).

Efficiency wage theory can also help to explain some of the wage differentials between native and immigrant workers. Workers who belong to disadvantaged or discriminated groups (e.g., ethnic or racial minorities) are less likely to be paid higher than average wages because they already encounter more challenges in finding a new job and thus have fewer alternatives if they are let go because of shirking. They are more likely to suffer not only a wage loss but also prolonged periods of unemployment, compared to their majority co-workers. For minority workers who belong to discriminated groups, efficiency wages are therefore likely to be at, or even below, the market clearing rate. By paying lower wages to minority workers, employers could gain a comparative advantage (Bonoli and Fossati 2018).

Efficiency wage theory is not generally considered in conjunction with immigrant workers or labor market discrimination. However, Akerlof (1982) uses efficiency wage theory to distinguish the primary and secondary labor markets, as described in the labor market segmentation theory (Piore and Doeringer 1971, Piore 1979). Quite simply, in the primary labor market workers receive

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<sup>2</sup> Most studies using the “matching hierarchies” model to analyze recruiting decisions focus on lower skilled occupations.

efficiency wages, while in the secondary labor market they are paid at the market clearing rate (Akerlof 1982). Our model suggests that in the secondary labor market, staffed mostly by marginalized workers, the market clearing rate equals the efficiency wage because these workers suffer from discrimination. As a result, there is no incentive for firms to pay more than the market clearing rate, which is already perceived as a partial gift and generates reciprocation in the shape of higher productivity, motivation, and commitment.

### **4.3 Labor Shortage and Turnover Costs**

The third argument is that certain context conditions render the recruitment of minority candidates more attractive to employers. For instance, when economic growth is strong and unemployment is low, workers have more choice of jobs, while employers compete to hire and retain the best-suited workers. In such a context, preferring a minority applicant may be rational because employers can reasonably expect them to be more loyal employees; their higher risk of suffering from discrimination means these workers are less likely to quit than members of the majority group. Similarly, employers may also expect them to be more tractable and accepting of disadvantageous conditions in terms of job quality, pay, and flexibility (Moss and Tilly 2001, Waldinger and Lichter 2003, for a quantitative study, see Bonoli and Fossati 2018). However, findings from correspondence tests that also considered the economic context have been contradictory (Baert et al. 2015, Carlsson et al. 2018) or find no context effect (Zschirnt and Ruedin 2016).

### **4.4 Firm Size**

The fourth argument in line with the “lack of alternatives explanation” concerns the characteristics of the firm and their recruitment strategy. A number of studies have investigated the relationship between firm size and the prevalence of discrimination against minorities in recruitment. The dominant view, in this respect, is that large firms are less likely to discriminate, primarily for reasons related to more professional recruitment processes, and a higher level of internationalization, which should make them less inclined to use minority status as a sorting criterion (Holzer 1998, Carlsson and Rooth 2007, Baert and Omey 2015).

This argument, however, may not hold for the question we are interested in, i.e. the prevalence of instances of minority preference, which is different from low levels of, or the absence of, discrimination. In this case, we may expect small firms to be more inclined to prefer minority applicants. Small firms tend to pay lower wages, may offer lower opportunities for advancement, and as a result, may be less competitive in the labor market. Often having a local or regional focus, they are also likely to be restricted to hiring from a smaller, mostly local candidate pool. For this reason, they may prefer, all else being equal, candidates who have fewer alternatives in the labor market.

Moreover, some authors have argued that small firms are more likely to give an opportunity to applicants with a disadvantaged background, who could otherwise be avoided due to statistical discrimination. This is because small firms are better able to “take risks” in recruitment. In fact, in small firms, it is easier to monitor employee performance and as a result, spot a bad hiring ex-post

(Barron et al. 1987). Some studies have indeed found a more positive inclination towards disadvantaged groups, such as the long term unemployed, among small firms (Atkinson et al. 1996, Bonoli 2014). This effect may be particularly strong when hiring decisions are made by the owner of a (small) firm, who can monitor employee performance closely. We can thus hypothesize that small firms, and especially owners/recruiters, will be more inclined to take risks and prefer members of the minority in recruitment.

## 5 Empirical Illustration

### 5.1 The Case of Switzerland

To test the theoretical framework developed above, we use data from recently conducted correspondence tests that measured the discrimination of foreign named applicants on the Swiss labor market. Switzerland is an interesting country in which to study discrimination against foreigners because it has a substantial share of immigrant residents: more than one third of residents considered have a migration background<sup>3</sup> (Bundesamt für Statistik 2018) and are thus potential victims of discrimination. Furthermore, about two thirds of the immigrants in Switzerland come from EU member states and are highly skilled (Bundesamt für Statistik 2017, OECD 2012). While the overall integration of immigrants into the Swiss labor market is better than in other OECD countries (Liebig, Kohls and Krause 2012), immigrants still have higher unemployment rates and lower average salaries than native Swiss (OECD 2018 a, b, Bundesamt für Statistik 2015, 2018). One potential explanation for this difference in labor market outcomes is discrimination, in particular in the hiring process.

Field experiments on the labor market a powerful method to test for discrimination against foreign named candidates in hiring decisions. In the experiments conducted in Switzerland, fictitious paired applications, which differed only in the origin of the candidates (one native Swiss, one with a migration background – German or French, Kosovar, Turkish, or Cameroonian), were sent during the period from October 2017 to December 2018 in response to a total of 1,173 job vacancies for sales assistants, electricians, nurses and HR clerks, that had been posted on online job search platforms all across Switzerland, with the exception of the small Italian speaking region (for details on the correspondence tests see Fibbi et al. 2020, Zschirnt 2018, 2019, Zschirnt and Fibbi 2019). The differences in response rates are carefully recorded and the outcomes of the paired applications are coded as “none invited”, “both invited”, “majority preferred” and “minority preferred”. Overall, the results show that ethnic minority candidates experience hiring discrimination on the Swiss labor market even when they are Swiss dual nationals with a Swiss education: they have to write 30% more applications to be invited for a job interview compared to their native Swiss competitors (Zschirnt and Fibbi 2019).

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<sup>3</sup> According to the definition by the Swiss Federal Statistical Office “the ‘population with a migration background’ [...] includes all foreign nationals, naturalized Swiss citizens, except for those born in Switzerland and whose parents were both born in Switzerland, as well as Swiss citizens at birth whose parents were both born abroad.” (Bundesamt für Statistik, no date <https://www.bfs.admin.ch/bfs/en/home/statistics/population/migration-integration/by-migration-status.html>)

However, the results of the correspondence tests also show, that in 56 cases, employers only invited the minority candidate of an applicant pair for a job interview. It is these 56 cases in the category of “minority preferred” are the focus of this paper (Table 1). The use of a paired research design allows us to look at a preference for the minority candidate which would be less clear in a non-paired design. In an unpaired design, it is unclear if the minority applicant might have been the only applicant for an employer or if the employer might have invited both candidates given the opportunity. In the paired design, we can observe the cases where employers are presented with two equally qualified candidates but show a preference for the minority candidate.

*Table 1: Descriptive statistics of the outcome variable, pooled tests*

<b>Total number of jobs</b>	<b>None invited</b>	<b>Both invited</b>	<b>Majority preferred</b>	<b>Minority preferred</b>
1173	686	302	129	56

## 5.2 Operationalization

*Dependent variable:* to measure minority-preference we use a dichotomous<sup>4</sup> variable that distinguishes between instances where only the minority applicant (=1) was invited and instances where both candidates were either accepted or rejected or where only the majority candidate was invited (=0).

Most of our independent variables are based on information collected from the job advertisements included in the correspondence tests.

*Independent variables:* we operationalize firm size, distinguishing between large (=1) and small and medium enterprises (SMEs) (=0); we distinguish firms that are located in urban (=1) and rural (=0) settings; and firms that operate with a global (reference), national or local outreach.

We also coded the available information about the contact person indicated in the job advertisement or information that could be retrieved from the email correspondence with employers. Concerning the contact person, we measure gender (female=1); whether s/he is Swiss (reference) or stems from the EU, another European but non-EU country or from outside Europe; and whether s/he is the owner, HR assistant, or manager of the firm (reference no information on contact). We also control for whether documents had to be handed in by email (=1) or via an online recruiting platform (=0).

Furthermore, we include some information on the job description, namely if customer contact is explicitly mentioned as a requirement (=1) in the advertisement or if there is no explicit mention (=0), and if the job requires an apprenticeship level qualification (electrician, sales assistant =1) or an intermediate qualification (nurses, HR clerks =0). We also capture whether the job is fulltime (=1) or part-time (=0), the contract is temporary (=1) or permanent (=0) and whether the job is in the public (=1) or private (=0) sector. These variables may give an indication of the desirability of the position. Finally, we control for the regional unemployment level.

<sup>4</sup> We re-ran all analyses with a multinomial model that distinguishes between employers inviting 1) minority only, 2) majority only, 3) reject both applications, and 4) invite both applicants. The factors influencing minority preferences remain the same.

### 5.3 Estimation

It has to be kept in mind that instances of minority preferences are not so numerous. This means that we estimate logit models that are adapted for rare events, i.e. where the number of outcomes is a number of times lower than the non-outcome. For this estimation, we use the *relogit* command in Stata, as suggested by King and Zeng (2001). We only show binary regressions because of the low number of cases in the cell. However, in the appendix, we also provide a multivariate estimation where the results remain stable. However, as the sample size is very small we also take non-significant results into account when discussing our findings. Of course, this evidence should be tested further in future studies.

## 6 Results

In the experiments included in our analysis, Swiss employers preferred the minority candidates in 56 out of 1173 cases (4.8%). This is very close to the average of minority preference instances across the studies included in the meta-analysis by Zschirnt and Ruedin (2016), where the average is at 4.5% (min 0.7%, max. 13%).

Table 2: Bivariate models

	(1) Custo- mer contact	(2) Job type	(3) Dura- tion of contract	(4) Qualifi- cation level	(5) Occu- pation type	(6) Context	(7) Company size	(8) Company type
<b>Job characteristics</b>								
Customer contact	0.889 (0.277)							
Fulltime job		0.864 (0.235)						
Undetermined contract			1.307 (0.520)					
Low qualification level				0.766 (0.207)				
HR clerk					1.751* (0.442)			
Nurse					0.867 (0.351)			
Sales personnel					0.961 (0.302)			
<b>Firm characteristics</b>								
Urban context						2.219*** (0.525)		
Big company							0.902 (0.195)	
Public firm								1.099 (0.620)
<b>N</b>	<b>1056</b>	<b>1050</b>	<b>1056</b>	<b>1056</b>	<b>1056</b>	<b>1051</b>	<b>1002</b>	<b>1010</b>

Exponentiated coefficients. Standard errors in parentheses. Relogit command in Stata.

+ p<0.1, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Table 2: Bivariate models (continuation)

	(9) Recruiting	(10) Application channel	(11) Female recruiter	(12) National recruiter	(13) Field of recruiter	(14) Unemploy- ment
National recruiting (ref. local)	1.477 (0.420)					
Global recruiting	1.282 (0.421)					
Email application		1.585+ (0.427)				
<b>Recruiter details</b>						
Female			0.668 (0.185)			
Non-Swiss nationality				1.057 (0.292)		
HR (ref. no information)					0.826 (0.258)	
Manager					0.847 (0.204)	
Owner					10.820*** (7.424)	
Unemployment level canton						0.869 (0.142)
<b>N</b>	<b>1037</b>	<b>1056</b>	<b>832</b>	<b>1056</b>	<b>1056</b>	<b>810</b>

Exponentiated coefficients. Standard errors in parentheses. Relogit command in Stata.

+ p<0.1, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

The results of our analysis are presented in Table 2. First, we find that employers in urban settings are significantly more likely to prefer minority applicants. This is in line with our expectations that employers in urban settings should be more likely to invite minority applicants because of their more international orientation and might be more used to hiring applicants with different backgrounds. Moreover, it could be that individuals with libertarian values are especially liable to cluster in cities (Maxwell 2019) and that individuals who are more tolerant towards minorities will be more likely to invite minority-candidates only.

However, we also find that owners of firms, in particular, are significantly more likely to prefer minority candidates. This is an indication that different types of mechanisms are at play. We expected that, especially in smaller firms, an owner would recruit the candidates himself or herself. This means he or she would probably also be working closely together with new staff and thus be more willing to take a chance and hire someone from a different background. The explanation for this would be that the owner is in a position to supervise new staff directly and thus also fire an employee should his or her performance be found wanting.

We also have some evidence for further mechanisms that could be influencing minority preferences. Although the findings are non-significant, we would like to discuss our other results that partially support our expectations. Similarly to the argument that owners may be in a position to hire more “risky” candidates, small firms (SMEs) also seem to have the tendency to be more

positive towards minorities. Conversely, and in line with the finding for the urban environment as a driver for minority-preference, we also find that firms operating nationally (compared to firms operating locally) prefer minority candidates.

Furthermore, we find that employers explicitly noting the requirement of customer contact in their advertisement are less likely to prefer minority candidates (effect is non-significant). Additionally, we show that for fulltime positions and positions in the public sector minority candidate preference is less likely. This finding points to the theory of matching hierarchies, where minority candidates may be disregarded for more attractive positions. We do not find an effect for the ethnicity of the person in charge of the hiring decisions.

Finally, we also analyzed whether labor market tightness affects the likelihood of inviting minority members only for a job interview. The result, which is non-significant, is in line with the expectation; namely, that in contexts with a higher unemployment rate employers are less likely to invite minority members, probably because they have a more abundant choice of candidates. Conversely, we find that when unemployment is high employers tend to be choosy and reject both applications (i.e. from the minority and the majority candidates) more frequently.

## 7 Conclusion

Contrary to substantive work in the qualitative discrimination literature, most studies in the quantitative discrimination literature assume that minority preferences are just noise, which are mostly used to calculate the net discrimination rate. Already in the International Labor Organization (ILO) manual on field experiments, Bovenkerk acknowledges that hiring decisions for a majority or a minority candidate can be affected by random hiring effects and defends the use of this simplified presentation of results (1992, p.33). Surprisingly, up until now, there has been no systematic analysis of why employers might have reason to prefer inviting a minority candidate only (for an exception see Bonoli and Fossati 2018).

With this paper, we are able to underpin previous qualitative work and show that minority preferences are not randomly distributed, but that employers seem to have – albeit different – reasons for preferring minority candidates.

While we are not able to give an exhaustive account of this behavior because we focus on data collected in one correspondence study for Switzerland, we believe that this paper might contribute to the development of a more substantive research agenda, which addresses the “diversity of employers” motivation and hiring behavior. Understanding not only when minorities are discriminated against but also when minorities are advantaged will help to develop more efficacious policies to address discrimination. Moreover, positive discrimination does not always mean a better outcome for minorities. In fact, being advantaged in obtaining unrewarding work is a mixed blessing. On the one hand, having a job is probably better than not having one, however, less desirable jobs may also lead to lower socio-economic mobility and exploitation.

In sum, we are unable to pinpoint a single factor to explain minority-preference, rather, we are able to list some plausible explanations that the data at hand corroborate more or less strongly. This should not come as a surprise because employers' hiring behavior is likely to be complex and also diverse. Thus, looking for a single explanatory mechanism might be the wrong strategy.

This study faces several limitations, most of which are related to methodological constraints of correspondence tests. First, as we are only using data from correspondence tests conducted in Switzerland, the number of minority preference cases is very small. Here it would be useful to collect detailed data also from other previous correspondence tests and to analyze them in an aggregated way, in order to obtain a higher number of minority preference instances. Second, we only have information on the employer that could be obtained from the vacancy note or the email correspondence (e.g., the name and position of the person involved in the hiring process). From the name, we can code the gender of the person, while coding for ethnicity by name only is much harder. Therefore, we are currently not able to test whether ethnic entrepreneurs, if they are included in the sample at all due to their normally different hiring procedures, make different hiring decisions. Third, our information on the firm level is also limited to what is available in the vacancy or in online searches. We do not have detailed information on the firm size, the composition of employees, etc. Fourth, we do not know the wages offered in each position, as this information is not included in the vacancy notes and we do not know which wage candidates would have been offered in case they were made an employment offer. Therefore, we are not able to test the efficiency wage argument empirically at this stage. Finally, as the original data only looked at four occupations (electricians, sales assistants, nurses, and HR clerks), we are not able to test whether the level of qualification makes a difference. We might expect that highly skilled migrants might have different experiences.

We believe that there are avenues for further research; in particular, it would be interesting to merge and analyze existing correspondence testing data and try to replicate these analyses, while ideally combining these analyses with more detailed data on the recruiter and firm characteristics. A more ambitious avenue would consist in designing a dedicated correspondence test, which would target the firms and the jobs where, on the basis of theory, we can expect minority preference to be more prevalent, e.g. low skill jobs, labor market segments where there is a labor shortage, small firms, and firms with a corporate image that values diversity. These would be contrasted with firms/contexts with the opposite characteristics. Furthermore, conducting interviews or focus groups with employers who decided to invite (only) minority candidates could offer more qualitative insights on how these hiring decisions were made and complement the experimental data.

## Bibliography

- Aigner, Dennis J. and Glen G. Cain (1977). Statistical Theories of Discrimination in Labor Markets. *Industrial and Labor Relations Review*, 175–87.
- Akerlof, George (1982). Labor Contracts as Partial Gift Exchange. *The Quarterly Journal of Economics* 97(4), 543–569.
- Aasland, Aadne and Guri Tyldum (2016). Opportunities and Risks among the migrant workers in the hotel industry in Oslo. *The Nordic Journal of Migration Research* 6(2), 92–101, DOI: 10.1515/njmr-2016-0016.
- Arrow, Kenneth J. (1973). The Theory of Discrimination. In *Discrimination in Labor Markets*, eds. O. Ashenfelter and A. Rees. 15–42. Princeton: Princeton University Press.
- Atkinson, John, Giles Lesley, and Nigel Meage (1996). *Employers, Recruitment and the Unemployed*. London: Institute for employment studies.
- Auer, Daniel, Giuiano Bonoli, Flavia Fossati, and Fabienne Liechti (2019). The matching hierarchies, *International Migration Review* 53(1), 90–121. DOI: 10.1177/0197918318764872.
- Baert, Stijn and Eddy Omeij (2015). Hiring Discrimination against Pro-Union Applicants: The Role of Union Density and Firm Size. *Economist-Netherlands* 163, 263–80.
- Baert, Stijn, Bart Cockx, Niels Gheyle, and Cora Vandamme (2015). Is There Less Discrimination in Occupations Where Recruitment Is Difficult? *International Labour Review* 68(3), 467–500.
- Barron, John M., Dan A. Black, and Mark A. Loewenstein (1987). Employer Size- the Implications for Search, Training, Capital-Investment, Starting Wages and Wage Growth. *Journal of Labor Economics* 5(1), 76–89.
- Becker, Gary (1957). *The Economics of Discrimination*. 2<sup>nd</sup> ed. Chicago: University of Chicago Press.
- Bertrand, Marianne and Sendhil Mullainathan (2004). Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination. *The American Economic Review* 94(4), 991–1013.
- Bertrand, Marianne. and Esther Duflo (2017). Field Experiments on Discrimination. *Handbook of Economic Field Experiments, Volume 1*, 309–393. Elsevier.
- Bonoli, Giuliano, and Flavia Fossati (2018). More Than Noise? Explaining Instances of Minority Preference in Correspondence Studies of Recruitment. *Journal of Ethnic and Migration Studies*, 1–17.

- Bonoli, Giuliano and Karl Hinrich (2012). Statistical Discrimination and Employers' recruitment: Practices for Low-Skilled Workers. *European Societies* 14, 338–61.
- Bonoli, Giuliano (2014). Employers' Attitudes toward Long-Term Unemployed People and the Role of Activation in Switzerland. *International Journal of Social Welfare* 23, 421–30.
- 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, 547–73.
- Bovenkerk, Frank (1992). *Testing discrimination in natural experiments: a manual for international comparative research on discrimination on the grounds of "race" and ethnic origin*. Geneva: International Labour Office.
- Bundesamt für Statistik (no date). Population by Migration Status.
- Bundesamt für Statistik, retrieved from <https://www.bfs.admin.ch/bfs/en/home/statistics/population/migration-integration/by-migration-status.html> (accessed 11.09.2020).
- Bundesamt für Statistik (2015). Gross monthly wage, Swiss and foreigners – Private sector – Switzerland. Retrieved from <https://www.bfs.admin.ch/bfs/de/home/statistiken/arbeits-erwerb/loehne-erwerbseinkommen-arbeitskosten/lohnniveau-schweiz/personenbezogene-merkmale.assetdetail.304061.html>.
- Bundesamt für Statistik (2017). Demographic balance of the permanent resident population by citizenship 2010–2016. Retrieved from <https://www.bfs.admin.ch/bfs/de/home/statistiken/bevoelkerung.assetdetail.300195.html>.
- Bundesamt für Statistik (2018). Erwerbslosenquote gemäss ILO nach Geschlecht, Nationalität und anderen Merkmalen. Retrieved from <https://www.bfs.admin.ch/bfs/en/home/statistics/work-income/unemployment-underemployment-vacancies/ilo-unemployed.assetdetail.4463045.html>.
- Burke, Jana, Jill Bezyak, Robert T. Fraser, Joseph Pete, Nicole Ditchman, and Fong Chan (2013). Employers' Attitudes Towards Hiring and Retaining People with Disabilities: A Review of the Literature. *The Australian Journal of Rehabilitation Counselling* 19(1), 21–38. DOI: 10.1017/jrc.2013.2.
- Callaghan, George and Paul Thompson (2002). 'We Recruit Attitude': The Selection and Shaping of Routine Call Centre Labour. *Journal of Management Studies* 39(2), 233–254.
- Carlsson, Magnus and Dan-Olof Rooth (2007). Evidence of Ethnic Discrimination in the Swedish Labor Market Using Experimental Data. *Labour Economics* 14, 716–29.
- Carlsson, Magnus and Stefan Eriksson (2017). Do Attitudes Expressed in Surveys Predict Ethnic Discrimination? *Ethnic and Racial Studies* 40, 1739–57.

- Carlsson, Magnus, Luca Fumarco, and Dan-Olof Rooth (2018). Ethnic Discrimination in Hiring, Labour Market Tightness and the Business Cycle-Evidence from Field Experiments. *Applied Economics* 50, 2652–63.
- Darity, William. A. and Patrick L. Mason (1998). Evidence on discrimination in employment: Codes of color, codes of gender. *Journal of Economic Perspectives* 12(2), 63–90.
- Debonneville, Julien and Olivia Killias (2019). At Your Service! : The Making of Domesticity in Southeast Asia. *Moussons-Recherche En Sciences Humaines Sur L'Asie Du Sud-Est* (33), 119–142. DOI: 10.4000/moussons.4971.
- Den Butter, Frank. A., Enno Masurel, and Robert H. J. Mosch (2007). The economics of co-ethnic employment: incentives, welfare effects and policy options. *Handbook of Research on Ethnic Minority Entrepreneurship: A Co-evolutionary View on Resource Management*, 42–60. Cheltenham: Edward Elgar.
- Dover, Tessa, Cheryl E. Kaiser, and Brenda Major (2020). Mixed signals: The unintended effects of diversity initiatives. *Social Issues and Policy Review* 14(1), 152–181.
- Faist, Thomas (1994). States, Markets, and Immigrant Minorities: Second-Generation Turks in Germany and Mexican-Americans in the United States in the 1980s. *Comparative Politics* 26(4), 439–460.
- Fibbi, Rosita, Didier Ruedin, Robin Stünzi, and Eva Zschirnt (2020). Discrimination Based on Skin Colour? The Case of Cameroonian Applicants in the Swiss Labour Market. [Unpublished manuscript].
- Fischer, Michael (2009). Diversity management and the business case. In *Equal Opportunities and Ethnic Inequality in European Labour Markets: Discrimination, Gender and Policies of Diversity*, Karen Kraal, Judith Roosblad, and John Wrench (eds.), 95–118. Amsterdam: Amsterdam University Press.
- Friberg, Jon H (2012). Culture at work: Polish migrants in the ethnic division of labour on Norwegian construction sites. *Ethnic and Racial Studies* 35(11), 1914–1933.
- Friberg, Jon H and Arnfinn H. Midtbøen (2018). Ethnicity as Skill: Immigrant Employment Hierarchies in Norwegian Low-Wage Labour Markets. *Journal of Ethnic and Migration Studies* 44, 1463–78.
- Fritzsche, David and Effy Oz (2007). Personal Values' Influence on the Ethical Dimension of Decision Making. *Journal of Business Ethics* 75, 335–43.
- Guryan, Johnathan and Kerwin K. Charles (2013). Taste-based or Statistical Discrimination: The Economics of Discrimination Returns to its Roots. *The Economic Journal* 123(572), F417–F432.

- Hainmueller, Jens and Daniel J Hopkins (2014). Public Attitudes toward Immigration. *Annual Review of Political Science* 17, 225–49.
- Heckman, James J and Peter Siegelman (1993). The Urban Institute Audit Studies: Their Methods and Findings. In *Clear and Convincing Evidence: Measurements of Discrimination in America*, eds. Michael Fix and Raymond Struyk: 187–258. Washington, DC: The Urban Institute Press.
- Hemingway, Christine A and Patrick W Maclagan (2004). Managers’ Personal Values as Drivers of Corporate Social Responsibility. *Journal of Business Ethics* 50, 33–44.
- Holzer, Harry J. (1998). Why Do Small Establishments Hire Fewer Blacks Than Large Ones? *Journal of Human Resources* 33, 896–914.
- Joshi, Aparna and Hyuntak Roh (2009). The role of context in work team diversity research: a meta-analytic review. *Academy of Management Journal* 52, 599–627.
- Kaas, Leo and Christian Manger (2012). Ethnic Discrimination in Germany’s Labour Market: A Field Experiment. *German Economic Review* 13(1), 1–20.
- Kalev, Alexandra, Frank Dobbin, and Erin Kelly (2006). Best Practices or Best Guesses? Assessing the Efficacy of Corporate Affirmative Action and Diversity Policies. *American Sociological Review* 71, 589–617.
- King, Gary and Langche Zeng (2001). Logistic Regression in Rare Events Data. *Political Analysis* 9(2), 137–63.
- Lee, Hwok-Aun and Muhammed A. Khalid (2016). Discrimination of high degrees: race and graduate hiring in Malaysia. *Journal of the Asia Pacific Economy* 21(1), 53–76.
- Lengnick-Hall, Mark L., Philip M. Gaunt, and Mukta Kulkarni (2008). Overlooked and underutilized: People with disabilities are an untapped human resource. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management* 47(2), 255–273. DOI: 10.1002/hrm.20211.
- Liebig, Thomas, Sebastian Kohls, and Karolin Krause (2012). *The labour market integration of immigrants and their children in Switzerland*. OECD Social, Employment and Migration Working Papers Vol. 128. Paris: OECD Publishing.
- Maxwell, Rahsaan (2019). Cosmopolitan immigration attitudes in large European cities: Contextual or compositional effects? *American Political Science Review* 113(2), 456–474.
- McIntosh, Neil and David J. Smith (1974). *The extent of racial discrimination* (Vol. 40). PEP: London.

- McVittie, Chris and Andy McKinlay (2019). ‘Would it not be better to get someone out workin?’: ‘Safe prejudice’ against Polish workers. *European Journal of Social Psychology* 49(1), 19–30. DOI: 10.1002/ejsp.2382.
- Mori, Hiromi (1997). *Immigration policy and foreign workers in Japan*. New York, NY: Macmillan.
- Moss, Philip and Chris Tilly (2001). *Stories Employers Tell: Race, Skill, and Hiring in America*. New York: Russel Sage Foundation.
- Moss, Philip and Chris Tilly (1996). ‘Soft’ Skills and Race. *Work and Occupations* 23(3), 252–276.
- Neumark, David and Judith Rich (2019). Do field experiments on labor and housing markets overstate discrimination? A re-examination of the evidence. *ILR Review* 72(1), 223–252.
- Ng, Eddy S.W. and Ronald J. Burke (2005). Person-organization fit and the war for talent: does diversity management make a difference? *International Journal of Human Resource Management* 16: 1195–1210.
- Nkomo, Stella M., Myrtle P. Bell, Laura M. Roberts, Aparna Joshi, and Sherry M.B. Thatcher (2019). Diversity at a critical juncture: new theories for a complex phenomenon introduction. *Academy of Management Review* 44(3), 498–517.
- OECD (2012). *Jobs for Immigrants (Vol. 3): Labour Market Integration in Austria, Norway and Switzerland*. Retrieved from <http://dx.doi.org/10.1787/9789264167537-en>.
- OECD (2018a). Foreign-born unemployment (indicator). Retrieved from <https://data.oecd.org/migration/foreign-born-unemployment.htm>.
- OECD (2018b). Native-born unemployment (indicator). Retrieved from <https://data.oecd.org/migration/native-born-unemployment.htm> - indicator-chart.
- Offe, Claus and K. Hinrichs (1985). The political economy of the labour market in *Disorganized Capitalism: Contemporary Transformations of Work and Politics*. Claus Offe (ed.), 10–51. Cambridge: Polity Press.
- Perkins, Lesley. A., Kecia M. Thomas, and Gail A. Taylor (2000). Advertising and recruitment: Marketing to minorities. *Psychology and Marketing* 17, 235–255.
- Phelps, Edmund S. (1972). The Statistical Theory of Racism and Sexism. *The American Economic Review* 62, 659–61.
- Piore, Michael J. (1979). *Birds of Passage: Migrant Labor and Industrial Societies*. Cambridge: Cambridge University Press.

- Piore, Michael J. and Doeringer, Peter B. (1971). *Internal labour market and manpower analysis*. New York: M.E. Sharpe.
- Portes, Alejandro and Leif Jensen (1989). The enclave and the entrants - Patterns of ethnic enterprise in Miami before and after Mariel. *American Sociological Review* 54(6), 929–949. DOI: 10.2307/2095716.
- Portes, Alejandro and Min Zhou (1993). The new second generation: Segmented assimilation and its variants. *The ANNALS of the American Academy of Political and Social Science* 530(1), 74–96.
- Quillian, Lincoln, Devah Pager, Ole Hexel, and Arnfinn H. Midtbøen (2017). Meta-Analysis of Field Experiments Shows No Change in Racial Discrimination in Hiring over Time. *Proceedings of the National Academy of Sciences* 114, 10870–75.
- Quillian, Lincoln, Anthony Heath, Devah Pager, Arnfinn H. Midtbøen, Fenella Fleischmann, and Ole Hexel (2019). Do Some Countries Discriminate More than Others? Evidence from 97 Field Experiments of Racial Discrimination in Hiring. *Sociological Science* 6, 467–496. DOI: 10.15195/v6.a18.
- Riach, Peter. A. and Judith Rich (2002). Field Experiments of Discrimination in the Market Place. *The Economic Journal* 112(483), F480–F518. DOI: 10.2307/798458.
- Rivera, Lauren A. (2012a). Diversity within Reach: Recruitment Versus Hiring in Elite Firms. *The ANNALS of the American Academy of Political and Social Science* 639, 71–90.
- Rivera, Lauren. A. (2012b). Hiring as Cultural Matching: The Case of Elite Professional Service Firms. *American Sociological Review* 77(6), 999–1022. DOI: 10.1177/0003122412463213.
- Rynes, Sara L. and Barry Gerhart (1990). Interviewer Assessments of Applicant ‘Fit’: An Exploratory Investigation. *Personnel Psychology* 43(1), 13–35.
- Shapiro, Carl and Stiglitz, Joseph (1984). Equilibrium Unemployment as a Worker Discipline Device. *American Economic Review* 74, 433–444.
- Shih, Johanna (2002). ‘...Yeah, I could hire this one, but I know it’s gonna be a problem’: how race, nativity and gender affect employers’ perceptions of the manageability of job seekers. *Ethnic and Racial Studies* 25(1), 99–119. DOI: 10.1080/01419870120112076.
- Stewart, Lathonia Denise and Perlow, Richard (2001). Applicant Race, Job Status, and Racial Attitude as Predictors of Employment Discrimination. *Journal of Business and Psychology* 16(2), 259–275.
- Tilly, Charles (1990). Transplanted Networks. In *Immigration Reconsidered: History, Sociology, and Politics*, ed. Virginia Yans-MacLaughlin, 79–94. New York: Oxford University Press.

- Waldinger, Roger and Michael I Lichter (2003). *How the Other Half Works: Immigration and the Social Organization of Labor*. University of California Press.
- Wilson, Anna (2019). A silver lining for disadvantaged youth on the apprenticeship market: an experimental study of employers' hiring preferences. *Journal of Vocational Education & Training* 2(4), 1–21.
- Zamudio, Margaret M. and Michael I. Lichter (2008). Bad Attitudes and Good Soldiers: Soft Skills as a Code for Tractability in the Hiring of Immigrant Latina/os over Native Blacks in the Hotel Industry. *Social Problems* 55(4), 573–89.
- Zhou, Min (2004). Revisiting ethnic entrepreneurship: Convergencies, controversies, and conceptual Advancements. *International migration review* 38(3), 1040–1074.
- Zschirnt, Eva, and Didier Ruedin (2016). Ethnic Discrimination in Hiring Decisions: A Meta-Analysis of Correspondence Tests 1990–2015. *Journal of Ethnic and Migration Studies* 42, 1115–34.
- Zschirnt, Eva, and Rosita Fibbi (2019). Do Swiss Citizens of Immigrant Origin Face Hiring Discrimination in the Labour Market? *nccr – on the move Working Paper #20*, 1–38. <https://nccr-onthemove.ch/publications/do-swiss-citizens-of-immigrant-origin-face-hiring-discrimination-in-the-labour-market/>.
- Zschirnt, Eva (2018). Ethnic Discrimination in the Swiss Labour Market - Ethnic Hierarchies in Correspondence Test Results, Doctoral Dissertation, Université de Neuchâtel.
- Zschirnt, Eva (2019). Evidence of Hiring Discrimination against the Second Generation: Results from a Correspondence Test in the Swiss Labour Market. *Journal of International Migration and Integration*: 1–23.

## Appendix

### *Appendix A1: Explaining minority preferences, multivariate specification*

(1)		
Customer contact	0.886	(0.547)
Full time	0.964	(0.441)
Contract duration	1.377	(0.764)
Low education	0.713	(0.309)
Urban context	3.207**	(1.171)
Big company	0.684	(0.228)
Public	1.706	(0.893)
National	1.017	(0.372)
Global	1.200	(0.454)
Email	2.214	(1.132)
Female	0.832	(0.548)
Non-Swiss	0.817	(0.201)
HR	0.623	(0.219)
Manager	0.475+	(0.209)
Owner	12.072+	(15.377)
Unemployment	0.930	(0.252)
<b>N</b>	<b>551</b>	

Exponentiated coefficients. Standard errors in parentheses.

Relogit command in Stata.

+ p<0.1, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001