

Do Large Employers Treat Racial Minorities More Fairly? An Analysis of Canadian Field Experiment Data

RUPA BANERJEE

Ted Rogers School of Management, Ryerson University, Toronto, Ontario

JEFFREY G. REITZ

R.F. Harney Program, Munk School of Global Affairs, University of Toronto, Toronto, Ontario

PHIL OREOPOULOS

Department of Economics, University of Toronto, Toronto, Ontario

Une analyse des données modifiées d'une vaste étude de vérification en matière d'emploi (Oreopoulos 2011) montre qu'il existe d'importantes différences, selon la taille des entreprises, en matière de discrimination envers les postulants d'un emploi ayant un nom asiatique (chinois, indien ou pakistanais), ces derniers étant moins susceptibles d'être invités à passer une entrevue d'embauche. Dans les entreprises de plus de 500 employés, la probabilité que ces postulants soient invités à une entrevue est de 20 % inférieure, et ce chiffre est de près de 40 % dans les entreprises plus petites. Si les grandes entreprises font preuve de moins de discrimination, c'est possiblement parce qu'elles disposent de plus de ressources en matière de recrutement et de formation, qu'elles font plus de développement des ressources humaines et qu'elles ont une plus grande expérience de la diversité culturelle. Modifier les CV reçus pour qu'ils soient anonymes quand ils sont examinés pourrait être une façon relativement peu coûteuse pour les entreprises de vérifier que leurs procédures d'embauche ne sont pas discriminatoires.

Mots clés : étude de vérification, discrimination à l'embauche, immigration, minorités raciales, taille de l'employeur

Analysis of amended data from a large-scale Canadian employment audit study (Oreopoulos 2011) shows substantial organization size differences in discrimination against skilled applicants with Asian (Chinese, Indian, or Pakistani) names in the decision to call for an interview. In organizations with more than 500 employees, Asian-named applicants are 20 percent less likely to receive a callback; in smaller organizations, the disadvantage is nearly 40 percent. Large organizations may discriminate less frequently because of more resources in recruitment and training, more human resources development, and greater experience with diversity. Anonymized résumé review may allow organizations to test hiring procedures for discrimination fairly inexpensively.

Keywords: audit study, hiring discrimination, immigration, racial minorities, employer size

This study examines the extent of discrimination against skilled immigrants from Asian backgrounds in Canada today, including those of Chinese, Indian, and Pakistani backgrounds, and asks whether this type of discrimination varies according to type of employer. Our focus in particular is on any differences between employers in large and more modern organizations compared with

smaller organizations with fewer human resource management (HRM) capabilities. Is the practice of discrimination minimized through more progressive organizations' use of modern HRM processes? These more professional recruitment processes may be aimed at maintaining and enforcing more objective and non-prejudicial criteria.

We use evidence from the discrimination audit study conducted in Toronto and Montreal in 2008 and 2009 by Oreopoulos (2011). In this study, employers were sent 12,910 résumés in response to 3,225 job postings, and whether the employers called to request an interview was recorded. These data represent the largest and most extensive body of audit-based information on racial discrimination in Canada today. Although Canada prides itself on being among the most inclusive societies in the world, and the 2016 Social Progress Index ranks Canada second in the area of tolerance and inclusion, the findings of this audit provide clear evidence that discrimination based on racial origins persists in the Canadian labour market today. In this article, we build on these results and supplement the original data with information on the employers who posted the jobs, which enables us to examine how employer characteristics affect the propensity to discriminate.

We begin with an overview of research on racial discrimination in Canada today and show that some of the controversies about the extent of such discrimination have been significantly clarified by the employment audit methodology. We also describe the previous specific findings of most interest here. We then describe our further analysis to distinguish types of employer and how they vary in the treatment of minority applicants.

Importance of Employment Audit Studies in Assessing Discrimination

Employment audit studies have made an important contribution to the study of racial discrimination. The conventional research approach to the study of discrimination is based on comparisons of immigrants and racial minority groups in census or labour force survey data, with differences in qualifications adjusted statistically. These studies are open to alternative interpretation. From these studies, it is known that racial minorities face a significant disadvantage in employment (e.g., Baker and Benjamin 1997; Palameta 2007; Pendakur and Pendakur 2002, 2007, 2011; Skuterud 2010). Although racial minority immigrants experience the most significant hardship (Li and Li 2013), even native-born minorities tend to earn less than their White counterparts, particularly in the private sector (Hou and Coulombe 2010). The employment disadvantage of Canadian-born racial minorities is of particular interest because they are a young and growing population who have been raised and educated in Canada and are fluent in English, French, or both (Statistics Canada 2013). Therefore, any disparity that they face relative to their White counterparts is not likely to be the result of language difficulties or the lack of transferability of foreign qualifications. Nevertheless, the possibility exists that differences may arise from other factors that affect employer assessments of productivity.

Audit studies address discrimination by observing actual employer responses to simulated résumés that vary only in the information about the origins of applicants and on which productivity-related qualifications are presented as identical. Several discrimination audit studies have been conducted in other countries, including the United States (e.g., Bertrand and Mullainathan 2004; Gaddis 2015; Kang et al. 2016), Sweden (Carlsson and Rooth 2007), France (Adida, Laitin, and Valfort 2010), and Germany (Kaas and Manger 2010). All found significant discrimination against minority applicants. Neumark (2012) reviewed such audit studies and concluded that audit studies that control for observable variations in applicants' quality that may affect hiring outcomes provide much more reliable and unbiased measures of employer discrimination than survey data. Several studies have used the audit study design to examine racial discrimination in the hiring process. The type of discrimination they capture is what is often called "direct discrimination" and includes implicit, statistical, and prejudicial discrimination. A limitation of audit studies is that typically they focus on only one employer decision—for example, the call for an interview—and omit others that may contribute to the overall minority earnings disadvantage.

In the present study, we build on Oreopoulos' (2011) original Canadian data to examine the impact of organizational and job characteristics on discriminatory practices in the decision to call an applicant for an interview.

The 28 Percent Asian Name Disadvantage

Résumés used in the Canadian discrimination audit contained standardized qualifications and varied only in the ethnic character of the name on the résumé. The sample was drawn from jobs posted online that accepted applications by e-mail on the basis of PDF résumés, focusing on jobs that most often require an undergraduate degree (but not a higher degree) and several years of experience. For the résumés, racial background was indicated by whether the applicant had an Anglo-Canadian name or an Asian name (Chinese, Indian, or Pakistani).¹ All résumés indicated bachelor's degrees and other qualifications to ensure comparability across groups. The résumés were sent in random order to the employers, within a few days of one another. Discrimination was revealed in disparities at the first stage, screening of applicants, specifically in whether the employer called for an interview.

Analysis shows that an Asian name on a résumé can put the applicant at a serious disadvantage in the attempt to get a foot in the door with Canadian employers. Specifically, applicants with Asian names have a 28 percent reduced likelihood of getting called for an interview compared with applicants with an Anglo name even when all qualifications are equivalent and Canadian in origin

Table 1: Estimated Callback Rates by Résumé Type, Asian Name, and Anglo Name, for All Employers and by Employer Size

Résumé Type	Overall Estimated Callback Rate (Proportional Difference between Callback Rates for Asian-Named Applicants and Anglo-Named Applicants)				
	Full Sample (N = 9,230) (1)	Employer-Size Subsample ^a (n = 1,278)			
		All Employers (2)	Large Employers (3)	Medium Employers (4)	Small Employers (5)
Anglo name, Canadian education, Canadian experience	0.157 (—)	0.701 (—)	0.674 (—)	0.703 (—)	0.708 (—)
Asian name, Canadian education, Canadian experience	0.113*** (-0.280)	0.473*** (-0.326)	0.538* (-0.201)	0.426*** (-0.394)	0.446*** (-0.371)
Asian name, foreign education, Canadian experience	0.111*** (-0.297)	(—)	(—)	(—)	(—)
Asian name, foreign education, Mixed experience	0.085*** (-0.461)	(—)	(—)	(—)	(—)
Asian name, foreign education, foreign experience	0.059*** (-0.625)	(—)	(—)	(—)	(—)
Asian name, some foreign qualification ^b	—	0.326*** (-0.535)	0.441*** (-0.346)	0.277*** (-0.607)	0.242*** (-0.659)

^a In Columns 2–5, the employer size subsample was limited to those cases in which the employer called back at least one applicant and for which employer size data were available. Results are derived from regression using the following linear probability model: $y_{ijt} = \delta_0 + \delta_1 \text{RésuméType}_{ijt} + \delta_2 \text{EmployerSize}_{ijt} + \delta_3 [\text{RésuméType}_{ijt} * \text{EmployerSize}_{ijt}] + \text{Year}_{ij} + e_{ijt}$, where y_{ijt} is an indicator variable for whether résumé i sent to job posting j in period t generated a callback, RésuméType_{ijt} is an indicator variable for résumé type, with the indicator for type 0 (Anglo name with Canadian education and experience) is the omitted reference category. $\text{EmployerSize}_{ijt}$ refers to the size of the employer (small, < 50; medium, 51–499; large ≥ 500). Year_{ij} refers to the year of data collection (2008 or 2009). The estimated callback rate for an Asian name relative to an Anglo name is calculated as 1—(estimated callback for Asian/estimated callback for Anglo).

^b Combines applicants with foreign education, mixed or foreign experience, or both.

* Difference relative to Anglo is significant at $p < 0.1$; **Difference relative to Anglo is significant at $p < 0.05$; ***Difference relative to Anglo is significant at $p < 0.01$.

Source: Data in Column 1 are from Oreopoulos (2011, Figure 4), controlling for time indicators. Note that this analysis excludes applicants with Greek names, Chinese with Anglo first names, and Anglo names with foreign credentials.

(see Table 1, Column 1, second row). This means that for every 100 calls received by applicants with Anglo names, applicants with Asian names received only 72.² The Asian-name disadvantage was somewhat greater for women than for men (Oreopoulos 2011, 164), in that employers showed a preference for women among the Anglo applicants but not among the Asian-named applicants. Because the résumés with Asian names indicated equivalent Canadian education and experience, this finding can be considered as a measure of the extent of racial discrimination in the process of granting interviews. This is because the distinction of an Anglo-Canadian versus an Asian name was the only basis on which employers could choose between the two applicants. Other than the difference in names, the applicants presented similar qualifications that were entirely Canadian in origin, and an Asian name very clearly references race. If racial discrimination is defined as a different outcome for different

racial groups that can be attributed to race and not to actual qualifications, then the finding truly represents racial discrimination.

This finding's implication of discrimination is appropriate regardless of whether the employer was concerned about the qualifications of the Asian-named applicants. Oreopoulos (2011) contacted employers at a later stage of his research to get their perspectives on the results, and many indicated that an Asian name suggested the possibility of language problems and a heavy accent. However, as Oreopoulos observed, the information in the résumés—including the Canadian education and experience—would contradict this concern, and in any case the employer could easily check by means of a quick telephone call. The language difficulty rationale was also challenged by the fact that rates of discrimination were similar regardless of the extent to which the job required communication skills. So employers had

no evidence to base their concerns about the language skills of the Asian applicants from whom they received résumés.

However, another aspect of the study was the inclusion of résumés that indicated applicants had an Asian name but foreign education and varying degrees of foreign experience. Analysis showed that applicants with Asian names plus foreign education but whose experience was Canadian were 29.7 percent less likely to get a callback than applicants with Anglo names; if the Asian applicant had a mix of Canadian and foreign experience, 46.1 percent less likely; and if the Asian applicant had only foreign experience, 62.5 percent less likely (see Table 1, Column 1, second, third, and fourth rows). In other words, among Asian applicants with foreign education, the presence or absence of Canadian experience made a very large difference in the response of employers.

Less frequent positive responses to résumés with some or all foreign qualifications have a different implication regarding racial discrimination. In many cases, there may be a legitimate concern among employers about the relevance of foreign qualifications, including both education and experience. This is why so much attention has been given to the question of the equivalence of these qualifications, how immigrants may demonstrate that equivalence, and how they may make up for any deficiencies. Nevertheless, there is also a potential for discrimination in assessment of these qualifications, and it is of interest to see which employers show themselves willing to give an Asian with foreign qualifications a chance. Efforts to keep such applications active and to follow up with an interview may indicate greater openness to diversity and to accommodation of difference, and our study is interested in how such a response may depend on employer characteristics.

Questions about Types of Employers

What types of employers reject applications simply on the basis of an applicant's Asian name? And what types are unwilling to pursue applicants with Asian names, even with Canadian qualifications or possibly even with some foreign qualifications? Are the Asian name-averse employers representative of older or more traditional segments of the labour market, in which skills may be required but matter less than finding employees who will fit in with the company? Do employers who adopt modern HRM techniques move beyond these traditional prejudices to take advantage of the diversity of today's Canadian workforce? These are important questions because they may suggest whether changes toward a more advanced and knowledge-based economy are likely to break down vestiges of racial discrimination, or whether such discrimination is simply maintained and practiced in new forms. There has been a tendency to

see racial discrimination as a practice of the past rather than as part of Canada's present-day reality. Although the fairly recent Canadian audit study findings show that discrimination is far from eliminated, it may still be argued that trends in modern management are toward less discriminatory procedures. Is this really the case?

This is a question with practical and theoretical implications. Some employers believe that the process of modernizing their HRM procedures is largely complete and that new selection methods render racial discrimination all but impossible. However, others suggest that the recruitment function in any organization functions in a political environment that sets criteria for judging performance on the basis of the kinds of workers selected. This opens the door for popular preferences to influence human resources procedures. Such pressures may exist whether the human resource function is internal to an organization, or whether recruitment is conducted by external agencies.

The effect of formalized HRM practices on discriminatory behaviour has been examined by many organizational theorists and researchers over the years. In fact, it has been argued that the field of HRM arose because of the need for companies to comply with government-mandated equal opportunity legislation. In 1960s and 1970s, personnel managers became advocates for codified selection, performance evaluation, and promotion practices as a way to curb favouritism and discrimination without having to resort to quotas (Bassford 1974; Bell 1971; Dobbin et al. 1993; Harvard Law Review 1989). Although some have argued that these HRM practices are simply symbolic gestures that legitimize the status quo without having any substantive impact on the employment status of disadvantaged groups (e.g., Acker 1990; Edelman 1992; Ferguson 1984), others have found that formalized HRM does have a real impact on discriminatory behaviour (e.g., Bielby 2000; Glasser 1988; Goodman, Fields, and Blum 2003; Reskin 2000). Still others contend that the relationship is more complicated and that HRM managers must make an explicit effort to increase diversity and improve the status of specific disadvantaged groups to have any impact at all (Dobbin, Schrage, and Kalev 2015; Konrad and Linnehan 1995).

Employer Size and the Hiring Process

The original Canadian audit study data did not include information on employer characteristics, so for this study it was necessary to add this information. The data set included the name of the employer organization, which provided the opportunity to gather data on organization size, specifically the number of employees in the recruiting organization. This is useful because large organizations may be expected to differ from smaller

organizations in several aspects potentially relevant to discrimination. More than 70 percent of private sector employees in Canada work for a small employer (fewer than 100 employees), so it is important to understand whether small employers behave differently than larger employers (Innovation, Science and Economic Development Canada 2016). Many empirical studies have confirmed that small organizations are more likely to operate in an informal and flexible manner than are larger firms (Chaston 1997; Crick and Chaudry 1997; Gibb 1997; Hendrickson and Psarouthakis 1998; de Kok and Uhlaner 2001; Marlow and Patton 1993; Pfeffer 1994; Whittington 1993). Studies of minority employment disadvantage have found that racial minorities tend to do better in more rule-bound work environments. For example, Fang and Heywood (2006) found that racial minorities in Canada earn more if they are in piecework or output-based pay settings. Similarly, Hou and Coulombe (2010) found that Canadian-born racial minorities fare much better in the public sector than in the private sector. The public sector has larger establishment sizes on average than the private sector and therefore is more likely to have the resources to allocate to standardized recruitment practices.

The theoretical and empirical literature points to a number of factors that may alter the nature of the hiring process for larger organizations and thereby decrease the likelihood of discrimination. First, the more resources devoted to recruitment, the more intensive the review of applications, the larger the number of applications that can be reviewed carefully, and the more interviews that can be conducted. All of this may work to increase the likelihood that a minority candidate may be considered fairly, because the process is unlikely to be swayed by something as superficial as the ethnic character of the applicant's name.

Second, a more professionalized recruitment process may influence the degree to which the review of applicants' files is systematic, focuses on key qualifications, and militates against relying on extraneous considerations. Professionalized recruitment may also incorporate processes of multiple stages, group-based review, and explicit procedures to prevent discrimination, all of which may give additional opportunity to minority applicants.

Third, a more diverse organization may also create or reflect an environment that is more open to non-discriminatory hiring. The experience of hiring and working with minorities may serve to mollify concerns or fears that may exist about the question of diversity. In fact, in cities with diverse populations such as Toronto and Montreal, large organizations may be expected to have confronted and addressed those issues in an effective manner.

Finally, larger organizations may have more resources to devote to training for new hires, which may help them make up for any lack of direct Canadian experience that minority applicants may be perceived as needing. This may make larger firms more willing to consider such job applications.

Of course, all these hypotheses may be false. They all assume a social environment that is essentially supportive of non-discriminatory hiring, and if that assumption is not correct, then none of these processes may operate as outlined here. More careful review of applications, more systematic assessment of qualifications, and more experience with Asian applicants would not be expected to lead to better outcomes for Asians if those who conduct the reviews believe that the organization basically does not want Asian workers or that management will look less favourably on recruiters who too frequently recommend the hiring of Asians. In other words, social indifference to the question of discrimination may mean that even larger organizations with their resources, professional HRM, and experience with diversity will be unable to overcome discriminatory hiring.

Some previous audit study research has examined employer characteristics, including size, providing some indication of more discrimination in smaller organizations, at least when credential assessment processes are relevant. On the one hand, Bertrand and Mullainathan (2004) focused on blue-collar jobs, in which assessment of qualifications by human resources procedures may not be relevant. They found that those with White-sounding names received 50 percent more callbacks from employers than those with Black-sounding names, and there were no significant differences by occupation, industry, or employer size. By contrast, Carlsson and Rooth (2007) found in Sweden that those with Swedish names received 50 percent more callbacks than those with Middle Eastern names, and small employers (those with fewer than 20 employees), those with high turnover, and those located in municipalities with relatively few immigrants were more discriminatory in their selection. In Germany, Kaas and Manger (2010) found a German name increased the probability of a callback by about 14 percent. In small firms, however, the rate of discrimination was much higher: Those with German names were 24 percent more likely to receive a callback from employers with fewer than 30 employees.

Adding Organizational Size to the Data

To the original Oreopoulos (2011) data, we have added a measure of organizational size, using information about each organization obtained from an Internet search.³ We analyzed three categories of organization size: those with 50 or fewer employees, those with 51–500 employees,

and those with more than 500 employees. From the 3,225 job postings tested originally, we excluded those for which none of the résumés received a call for an interview (and hence yielded no information about discrimination), which left 2,516 employers. Of those, we were able to obtain information on organizational size for 1,609 employers (63.9 percent; 670 small organizations, 457 medium-sized organizations, and 495 large organizations = 1,622 organizations, minus missing cases on other variables = 1,609). We also excluded cases for which the only return calls were for résumés with Greek names or for British immigrants, leaving 1,278 job postings. Hence, our analysis is based on the 1,278 job postings for which return calls were made to either an Anglo-named or Asian-named applicant and for which information was available on the number of the organization's employees.

In this sample ($N = 1,278$), the basic patterns originally reported in Oreopoulos (2011) are altered only slightly. Whereas the original analysis showed a 28.0 percent disadvantage for those with Asian names and all Canadian qualifications, in the sample with employer-size data the corresponding Asian name disadvantage is 32.6 percent (see Table 1, Column 2). The disadvantages for Asian-named applicants with foreign education but Canadian experience is 39.0 percent; for those with foreign education and some foreign experience, 50.3 percent; and for those with foreign education and all foreign experience, 72.3 percent. In the following analyses, for simplicity all résumés with any foreign qualifications are combined into one category. The Asian-name applicants with any foreign qualifications were 53.5 percent less likely to receive a call (Table 1, Column 2, last row).

Differences in Larger Organizations

We find that the tendency for Asian-named applicants to receive fewer calls was greatest in the small- and medium-sized organizations and somewhat less in the largest category, those with 500 or more employees. As shown in Table 1, Columns 3–5, second row, compared with applicants with Anglo names, the Asian-named applicants with all Canadian qualifications had 20.1 percent fewer calls from the largest organizations ($p < 0.10$), but 39.4 percent fewer from the medium-sized organizations ($p < 0.01$), and 37.1 percent fewer from the smallest organizations (fewer than 50 employees; $p < 0.01$). So the disadvantage of an Asian name is less in the large organizations, although it has not disappeared. The disadvantage of Asian-named applicants is about half of what it is for the medium-sized or small organizations.

Statistical analysis shows that the higher callback rates of Asian-named applicants by large employers relative to medium-sized or small employers is significant ($p < 0.08$; not shown). Despite this, when we analyze large employers separately, we find that Asian-named applicants

are still significantly less likely to be called for an interview compared with their Anglo counterparts ($N = 493$; $p < 0.01$; not shown). Both findings should be given attention. The lower level of discrimination against Asians in the larger organizations is an important finding with considerable implications for both theory and policy, as we explore later. At the same time, when we analyze discrimination in the large organizations alone, we find the 20.1 percent fewer calls to Asian-named applicants with all Canadian qualifications to be noteworthy. In a nutshell, although discrimination by large employers is less than that by medium-sized or small employers, it is still significant.

There is also an organizational size difference in treatment of Asian-named applicants with some foreign qualifications. Generally, the largest organizations are more likely to call these applicants for an interview than either the middle-sized or smaller organizations. Regarding Asian-named applicants with foreign qualifications, again large employers called these applicants 34.5 percent less often, whereas the medium-sized employers called them 60.1 percent less often, and the smaller employers called them 65.9 percent less often. Overall, calls to Asian-named applicants with foreign qualifications are less frequent than to those with all-Canadian qualifications, but the interorganizational differences follow the same pattern. The disadvantage for Asian-named applicants with foreign qualifications in large organizations is just over half what it is in medium-sized or small organizations. Again, the difference by organizational size is statistically significant ($p < 0.01$). Although all organizations tend to reflect skepticism in their response to foreign qualifications, the larger organizations appear to give somewhat more consideration to these résumés.

Variation by Occupational Skill Level

Does organizational size affect discrimination at the highest skill levels, for which jobs are likely to be the best paid? Although all applicant résumés indicated at least a bachelor's degree level of qualification, not all the jobs to which the résumés were submitted actually required the same level of skill. Most jobs required a bachelor's degree, but some did not, and although all were white-collar jobs, there was considerable variation in the level of employment, skills required, and likely remuneration. On the basis of the postings, we classified each job according to occupational status, closely related to skill level, using the Nam–Powers–Boyd (NPB) occupational status scale as adapted to the 2001 Canadian census categories (Boyd 2008). The NPB scores averaged 71.6, ranging between 19 and 96 and with a standard deviation of 17.7. The high-skill category (NPB score 80 or higher) included accountant, civil engineer, and sales and marketing manager; the mid-skill category (NPB score 65–75) included financial advisor, claims adjustor,

Table 2: Estimated Callback Rates for Anglo- and Asian-Named Applicants by Type of Qualification and Proportional Difference between Asian-Named Applicants and Anglo-Named Applicants, by Job Skill Level

Résumé Type	Overall Estimated Callback Rate (Proportional Difference between Callback Rates for Asian-Named Applicants and Anglo-Named Applicants)		
	All Jobs (N = 1,236)	High-Skilled Jobs (n = 633)	Low-Skilled Jobs (n = 603)
Anglo name, Canadian education, Canadian experience	0.688 (—)	0.719 (—)	0.678 (—)
Asian name, Canadian education, Canadian experience	0.468*** (-0.321)	0.483*** (-0.329)	0.470*** (-0.307)
Asian name, some foreign qualification	0.321*** (-0.533)	0.298*** (-0.585)	0.369*** (-0.457)

Note: Only those cases in which the employer called back at least one applicant were included in this analysis. All jobs were ranked using the Nam–Powers–Boyd occupational status score. Jobs with a status score of 75 or higher are considered high skill and those with a status score of less than 75 are considered low skill. Linear probability models were run separately for high- and low-skilled job postings using the following linear probability model: $y_{ijt} = \delta_0 + \delta_1 \text{RésuméType}_{ijt} + \text{Year}_{ij} + e_{ijt}$, where y_{ijt} is an indicator variable for whether résumé i sent to job posing j in period t generated a callback, RésuméType_{ijt} is an indicator variable for résumé type, with the indicator for type 0 (Anglo name with Canadian education and experience) was the omitted reference category. Year_{ij} refers to the year of data collection (2008 or 2009). Estimated callback rate for an Asian name relative to an Anglo name is calculated as 1—(estimated callback for Asian/estimated callback for Anglo).

* Difference relative to Anglo is significant at $p < 0.1$; **Difference relative to Anglo is significant at $p < 0.05$; ***Difference relative to Anglo is significant at $p < 0.01$.

Table 3: Estimated Callback Rates for Anglo- and Asian-Named Applicants by Type of Qualification and Proportional Difference by Employer Size and Job Skill Level

Résumé Type	Overall Estimated Callback Rate (Proportional Difference between Callback Rates for Asian-Named Applicants and Anglo-Named Applicants)			
	High-Skilled Jobs (n = 633)		Low-Skilled Jobs (n = 603)	
	Large-Sized Employers	Small- and Medium-Sized Employers	Large-Sized Employers	Small- and Medium-Sized Employers
Anglo name, Canadian education, Canadian experience	0.713 (—)	0.715 (—)	0.629 (—)	0.694 (—)
Asian name, Canadian education, Canadian experience	0.605*** (-0.157)	0.416*** (-0.437)	0.477*** (-0.241)	0.464*** (-0.331)
Asian name, some foreign qualification	0.402*** (-0.418)	0.232*** (-0.675)	0.505*** (-0.197)	0.294*** (-0.576)

Note: Only those cases in which the employer called back at least one applicant were included in this analysis. All jobs were ranked using the Nam–Powers–Boyd occupational status score. Jobs with a status score of 75 or higher are considered high skill, and those with a score less than 75 are considered low skill. Linear probability models were run separately for high- and low-skill job postings using the following linear probability model: $y_{ijt} = \delta_0 + \delta_1 \text{RésuméType}_{ijt} + \delta_2 \text{EmployerSize}_{ijt} + \delta_3 [\text{RésuméType} * \text{EmployerSize}_{ijt}] + \text{Year}_{ij} + e_{ijt}$, where y_{ijt} is an indicator variable for whether résumé i sent to job posing j in period t generated a callback, RésuméType_{ijt} is an indicator variable for résumé type, with the indicator for type 0 (Anglo name with Canadian education and experience) was the omitted reference category. $\text{EmployerSize}_{ijt}$ refers to the size of the employer. Small and medium-sized employers are grouped together in this analysis. Year_{ij} refers to the year of data collection (2008 or 2009). Estimated callback rate for an Asian name relative to an Anglo name is calculated as 1—(estimated callback for Asian/estimated callback for Anglo).

* Difference relative to Anglo is significant at $p < 0.1$; **Difference relative to Anglo is significant at $p < 0.05$; ***Difference relative to Anglo is significant at $p < 0.01$.

and computer support specialist; and the low-skill category (NPB 60 or less) included bookkeeper, accounts payable processor, restaurant manager, canvasser, and cashier.

We find when Asian-named applicants have all Canadian qualifications, the extent of discrimination is virtually the same regardless of the skill level of the job (see Table 2). The estimated callback rate was 32.9 percent less than for Anglo-named applicants for high-skill jobs and 30.7 percent less for low-skill jobs. However, when the Asian-named applicants had some foreign qualifications, the callback rates were lower, especially in the case of the high-skill jobs: 58.5 percent lower for high-skill jobs compared with 45.7 percent lower for low-skill jobs.⁴ This less favourable response to Asian-named applicants for high-skill jobs when they have some foreign qualifications may occur because the uncertainty of foreign qualification raises more concern when more is at stake in the credential assessment.

The difference between large and medium or small organizations in callback rates to Asian-named applicants definitely persists at the high-skill level (see Table 3). Most significantly, the difference is found for Asian-named applicants with all-Canadian qualifications as well as for those with some foreign qualifications. Asian-named applicants for high-skill jobs and with all-Canadian qualifications are 15.7 percent less likely to be called by large organizations, but 43.7 percent less likely to be called by medium-sized or small organizations ($p < 0.08$ in a pooled analysis). This suggests that the greater avoidance of Asian-named applicants by small- to medium-sized organizations is not related only to the difficulty in assessing foreign qualifications. When the Asian-named applicants for high-skill jobs have some foreign qualification, the calls are less frequent by 41.8 percent in the large organizations and by 67.5 percent in smaller organizations ($p < 0.07$). Hence, when the most sought-after jobs are at stake, organizational size affects responses to Asian-named applicants both when foreign qualifications are at issue and when they are not.

At the lower skill level, Asian-named applicants also receive less frequent calls, and again the medium and smaller organizations are less favourable. The organization size difference is particularly pronounced when the Asian-named applicants to low-skill jobs have some foreign qualifications. In large organizations, the Asian-named applicants to low-skill jobs with foreign qualifications receive 19.7 percent fewer callbacks, whereas their counterparts in small- to medium-sized organizations receive 57.6 percent fewer calls.

Impact of Additional Qualifications

We also ask whether aversion to Asian names is affected if the Asian-named applicant has a higher level of qualification than the Anglo-named applicant. How much

additional qualification does the Asian-named applicant need to offset the negative effect of the name itself? Some résumés sent to employers included an additional Canadian master's degree beyond the bachelor's degree. Does an additional degree awarded in Canada give the Asian-named applicant a more equal chance to be called for an interview, particularly for the highest skill-level jobs? Are there organizational differences in how additional qualifications might matter?

We focus attention on the high-skill jobs, where the additional master's degree is most relevant to improving prospects for a callback. At high skill levels, for Anglo applicants the possession of a Canadian master's degree improved prospects for a callback by 15.8 percent, whereas at lower skill levels it actually reduced prospects for a callback by 10.5 percent. Extra qualifications are appreciated in the case of high-skill jobs, but for low-skill jobs they could raise the question of overqualification, signalling possible problems such as lack of long-term job commitment, and be avoided for that reason.

Our data indicate that having a Canadian master's degree improves the prospects of a call for Asian-named and Anglo-named applicants. The Asian-name disadvantage continues; it is 34.4 percent without the master's and 30.4 percent with the master's (see Table 4, Columns 1 and 2). Notice, however, that the positive effect of the extra master's degree for Asian-named applicants, although notable, is not enough to offset the overall disadvantage of the Asian name relative to Anglo-named applicants without the extra qualification. The callback rate for Asian-named applicants with an extra master's degree, at 56.3 percent, is still 19.4 percent lower than it is for Anglo-named applicants without a master's.

This finding underscores the substantial size of the overall disadvantage for those with Asian names—it cannot be offset fully by simply adding extra Canadian qualifications, even an additional degree. Whether an even higher level of additional qualification for the Asian-named applicants would finally offset the disadvantage of the name itself is unclear, of course, but it is also possible that at some point the issue of overqualification and its negative effects might become significant.

If we examine these variations by organization size (Table 4, Columns 3–6), we see that the extra master's degree makes about the same difference for Asian-named applicants with Canadian qualifications as it does for the Anglo-named applicants regardless of organization size. Because the Asian-name disadvantage is less in large organizations, having the extra master's boosts the Asian-named applicant's callback rate to about equivalent to that for Anglo applicants without the master's (in Column 4, Row 2, the effect coefficient is 0.031 for the comparison of Asian-named applicants with a master's degree with Anglo-named applicants without a master's). In other words, in large organizations, the Asian-name

Table 4: Estimated Callback Rates for Anglo- and Asian-Named Applicants by Type of Qualification and Proportional Differences for Applicants with and without an Additional Canadian Master's Degree, for High-Skilled Jobs Only, for All Employers, and by Employer Size

Résumé Type	Overall Estimated Callback Rate (Proportional Difference Between Callback Rates for Asian-Named Applicants and Anglo-Named Applicants; Proportional Difference for Asian-Named Applicants Relative to Anglo-Named Applicants without the Additional Master's Degree)					
	All Employers (N = 633)		Employer Size (N = 633)			
			Large		Small and Medium	
	No Canadian Master's Degree (1)	Canadian Master's Degree (2)	No Canadian Master's Degree (3)	Canadian Master's Degree (4)	No Canadian Master's Degree (5)	Canadian Master's Degree (6)
Anglo name, Canadian education, Canadian experience	0.699 (—)	0.810 (—)	0.693 (—)	0.816 (—)	0.695 (—)	0.817 (—)
Asian name, Canadian education, Canadian experience	0.459*** (-0.344)	0.563*** (-0.304; -0.194)	0.578 (-0.165)	0.714 (-0.125; 0.031)	0.393 (-0.434)	0.493 (-0.397; -0.290)
Asian name, some foreign qualification	0.295*** (-0.577)	0.321*** (-0.603; -0.540)	0.382 (-0.449)	0.623 (-0.237; -0.102)	0.235 (-0.661)	0.223 (-0.728; -0.680)

Notes: Only those cases in which the employer called back at least one applicant were included in this analysis. All jobs were ranked using the Nam-Powers-Boyd occupational status score. Jobs with a status score of 75 or higher are considered high skilled, and those with a status score less than 75 are considered low skilled. Only high-skill job postings are included in this analysis. The following linear probability model was run only for high-skilled job postings:

$y_{ijt} = \delta_0 + \delta_1 \text{RésuméType}_{ijt} + \delta_2 \text{CanadianMaster'sDegree}_{ijt} + \delta_3 [\text{RésuméType}_{ijt} * \text{CanadianMaster'sDegree}_{ijt}] + \text{Year}_{ij} + e_{ijt}$, where y_{ijt} is an indicator variable for whether résumé i sent to job posting j in period t generated a callback, RésuméType_{ijt} is an indicator variable for résumé type, with the indicator for type 0 (Anglo name with Canadian education and experience) was the omitted reference category. $\text{CanadianMaster'sDegree}_{ijt}$ refers to whether the résumé included a master's-level degree from a Canadian educational institution. Year_{ij} refers to the year of data collection (2008 or 2009). Columns 3–6 are derived from three-way interaction term between Canadian master's degree, employer size, and résumé type. The estimated callback rate for an Asian name relative to an Anglo name is calculated as 1—(estimated callback for Asian/estimated callback for Anglo).

* Difference relative to Anglo is significant at $p < 0.1$; **Difference relative to Anglo is significant at $p < 0.05$; ***Difference relative to Anglo is significant at $p < 0.01$.

disadvantage may be overcome by possessing an extra Canadian master's degree. In the smaller companies, this is not the case, partly because the benefit of the Canadian master's is less and also because of the large gap in callback rates for these employers occasioned simply by having an Asian name (the effect of an Asian name even with the additional master's is -0.290). For the Asian-named applicants with foreign qualifications, the benefits of the Canadian master's are less, and this is particularly the case in the smaller organizations. So with the exception of Asian-named applicants with all Canadian qualifications, the addition of a Canadian master's degree does not serve to cancel out the disadvantage associated with having an Asian name. Those with an master's still have callback rates lower than those of the Anglo applicants even without the extra graduate degree.

Summary and Implications

Although employers both large and small exhibit discriminatory practices in the assessment of Asian-named applicants (based on Chinese, Indian, and Pakistani names) even when they have Canadian qualifications and show even more reluctance to consider Asian-named applicants with foreign qualifications, there is a substantial difference between larger and smaller organizations in this regard. Larger organizations are more receptive to Asian-named applicants than smaller organizations, whether they have Canadian qualifications or not. These biases are particularly evident for applicants for jobs at the highest skill levels, and the difference between large and smaller organizations is also quite evident in the data on responses to applicants for those jobs. In fact, to some extent the more favourable responses of large organizations occurs because of more favourable responses

to Asian-named applicants with foreign qualifications specifically in the case of low-skill jobs. However, there remains a substantial difference by organization size even for jobs at the high skill levels. Our analysis shows that large organizations also respond more favourably to the possession of extra qualifications, specifically a Canadian master's (which served to top up the qualifications of the applicants in this study, all of whom possessed a bachelor's degree). The extra degree provides a sufficient boost that tends to offset the Asian-name disadvantage when in competition with an Anglo applicant without the degree. For Asian applicants in smaller organizations, even the extra degree does not really alter the substantial disadvantage faced in attempting to get a job interview.

These findings have important implications for understanding employment discrimination and for taking steps to address it. Our hypotheses suggest that larger organizations might have more favourable outcomes for minorities because they devote more resources to the evaluation of applications, because they have a more professional recruitment process informed by the knowledge base of HRM, and because they have more experience with diversity because they have a larger workforce. Smaller organizations lack these advantages and may also find that hiring any single minority applicant may have a greater impact simply because of the organization's smaller size of the organization. All of these possibilities should be further explored. A relatively low-cost method for doing this would be for employers to experiment with anonymized résumés. They could on a random basis mask the names of applicants at the time of the initial screening and then track the results. They could also take steps to ensure that more information is used after the interview to make a hiring decision.

What the findings suggest overall is that discrimination represents the activities of employers who in some ways are themselves disadvantaged—in not having at their disposal the knowledge base and resources to fully appreciate the value of applicants whose names and in some instances qualifications may seem strange. They lack the experience to fully tap more diverse segments of the workforce.

The problem of discrimination in relatively smaller organizations is not necessarily easily addressed. These employers, though small, represent a significant part of the labour market, and yet they may be isolated to some degree from trends across industries toward more flexible and open hiring processes. Because they lack professional human resources staff, they may not be aware of practices developing in their industry or field of activity. In short, their isolation places them at a competitive disadvantage relative to larger, and evidently more successful, employers.

Some large organizations have become advocates of diversity hiring. They may be well-positioned to do so,

but in some ways their advocacy may not ring true to many smaller employers. Smaller employers may ask, "If diversity hiring creates a competitive advantage, why are large organizations giving away their secrets? Are they perhaps simply playing a public relations game?" These are legitimate questions, but the data here suggest that the resources large organizations put into hiring leads them to consider hiring minorities more often and to probe more deeply into the value of foreign qualifications.

Our hypotheses to explain the organization size effect should be tested in further studies that measure specific organizational characteristics, including specific hiring procedures, the use of human resources professionals, and external employment agencies. The existing racial diversity of an organization may also matter, as well as the availability of specific programs to assist in the integration of minority applicants. Finally, because résumé testing taps only the most preliminary stage of the process of access to employment, future research should explore how discrimination operates in the use of social networks to tap potential talent pools, as well as how it affects the hiring decision itself, and subsequent promotion and career advancement.

Recently, the government of Canada announced an experimental "name-blind" recruitment project for the federal public service (Keung 2017). To be effective, it is important to first identify that hiring discrimination does indeed exist in the organization in order to examine the benefits from name-blind hiring. In addition, the experimental screening procedure should provide for the removal of not only names but also any extraneous information identifying minority group membership, and the design of the experiment must be scientifically rigorous so that effects of name-blind hiring can be assessed reliably.

Acknowledgements

This research was supported with funds from the R.F. Harney Professorship and Program in Ethnic, Immigration and Pluralism Studies, Munk School of Global Affairs, University of Toronto (<https://munkschool.utoronto.ca/ethnicstudies/>). Original data collection was carried out with support from Metropolis British Columbia. The authors are grateful for research assistance provided by Noga Keidar and Tamar Becker and helpful comments by Heather Zhang. The authors also thank Hire Immigrants for organizing the "Confronting Hiring Bias" roundtable discussion and for commentaries by Ratna Omidvar, Corinne Prince St-Amand, Wendy Cukier, and Nicholas Keung that made significant contributions to the analysis.

Notes

- 1 Examples of Anglo-Canadian names (which we call "Anglo names" in this article) were Greg Johnson and Emily Brown; Indian names used included Samir Sharma and Tara Singh; Pakistani names included Ali Saeed and Hina Chaudhry, and Chinese names included Lei Li and Xuiying Zhang.

The study also included an examination of three other categories: those with English names who were immigrants from Britain, those with Chinese family names but English first names, and those with Greek names. Those results are not examined here.

- 2 In the original study, the finding was reported as an 39% Anglo advantage (Oreopoulos 2011, 160–61), because 100 calls is 39 percent more than 72 calls. This is mathematically equivalent, but we opt to present the results here in terms of the extent of Asian disadvantage relative to the mainstream Anglo population.
- 3 Internet information on employer size may not always pertain to the exact period of time during which the résumés were submitted; in some cases it may be more recent, and in some cases it may be based on earlier counts. However, it seems unlikely that large shifts in organization size affected a significant number of the employers.
- 4 In a pooled analysis across both high- and low-skill jobs, the interaction between minority status and skill level affecting the callback rate is only slightly negative in the case of Asian-named applicants with all Canadian qualifications (–0.027) and not significant; for those with some foreign qualifications the effect is larger (–0.116) and significant at the 0.07 level.

References

- Acker, J. 1990. "Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations." *Gender & Society* 4(2):139–58. <https://doi.org/10.1177/089124390004002002>.
- Adida, C.L., D.D. Laitin, and M. Valfort. 2010. "Identifying Barriers to Muslim Integration in France." *Proceedings of the National Academy of Sciences of the United States of America* 107(52):22384–90. <https://doi.org/10.1073/pnas.1015550107>.
- Baker, M., and D. Benjamin. 1997. "Ethnicity, Foreign Birth and Earnings: A Canada/US Comparison." In *Transition and Structural Change in the North American Labour Market*, ed. M.G. Abbott, C.M. Beach, and R.P. Chaykowski, 281–313. Kingston, ON: IRC Press, Industrial Relations Centre, Queen's University.
- Bassford, G.L. 1974. "Job Testing-Alternative to Employment Quotas." *Business Horizons* 17(1):37–47. [https://doi.org/10.1016/0007-6813\(74\)90020-2](https://doi.org/10.1016/0007-6813(74)90020-2).
- Bell, D., Jr. 1971. "Bonuses, Quotas, and the Employment of Black Workers." *Journal of Human Resources* 6(3):309–20. <https://doi.org/10.2307/144953>.
- Bertrand, M., and S. Mullainathan. 2004. "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." *American Economic Review* 94(4):991–1013. <https://doi.org/10.1257/0002828042002561>.
- Bielby, W.T. 2000. "Minimizing Workplace Gender and Racial Bias." *Contemporary Sociology* 29(1):120–29. <https://doi.org/10.2307/2654937>.
- Boyd, M. 2008. "A Socioeconomic Scale for Canada: Measuring Occupational Status from the Census." *Canadian Review of Sociology* 45(1):51–91. <https://doi.org/10.1111/j.1755-618X.2008.00003.x>.
- Carlsson, M., and D.O. Rooth. 2007. "Evidence of Ethnic Discrimination in the Swedish Labor Market Using Experimental Data." *Labour Economics* 14(4):716–29. <https://doi.org/10.1016/j.labeco.2007.05.001>.
- Chaston, I. 1997. "Small Firm Performance: Assessing the Interaction Between Entrepreneurial Style and Organizational Structure." *European Journal of Marketing* 31(11/12):814–31. <https://doi.org/10.1108/03090569710190550>.
- Crick, D., and S. Chaudry. 1997. "Small Businesses' Motives for Exporting: The Effect of Internationalisation." *Journal of Marketing Practice: Applied Marketing Science* 3(3):156–70. <https://doi.org/10.1108/EUM0000000004340>.
- de Kok, J., and L.M. Uhlaner. 2001. "Organization Context and Human Resource Management in the Small Firm." *Small Business Economics* 17(4):273–91. <https://doi.org/10.1023/A:1012238224409>.
- Dobbin, F., D. Schrage, and A. Kalev. 2015. "Rage against the Iron Cage: The Varied Effects of Bureaucratic Personnel Reforms on Diversity." *American Sociological Review* 80(5):1014–44. <https://doi.org/10.1177/0003122415596416>.
- Dobbin, F., J.R. Sutton, J.W. Meyer, and W.R. Scott. 1993. "Equal Opportunity Law and the Construction of Internal Labor Markets." *American Journal of Sociology* 99(2):396–427. <https://doi.org/10.1086/230269>.
- Edelman, L.B. 1992. "Legal Ambiguity and Symbolic Structures: Organizational Mediation of Civil Rights Law." *American Journal of Sociology* 97(6):1531–76. <https://doi.org/10.1086/229939>.
- Fang, T., and J. Heywood. 2006. "Output Pay and Ethnic Wage Differentials: Canadian Evidence." *Industrial Relations* 45(2):173–94. <https://doi.org/10.1111/j.1468-232X.2006.00423.x>.
- Ferguson, K.E. 1984. *The Feminist Case against Bureaucracy*. Philadelphia: Temple University Press.
- Gaddis, S.M. 2015. "Discrimination in the Credential Society: An Audit Study of Race and College Selectivity in the Labor Market." *Social Forces* 93(4):1451–79. <https://doi.org/10.1093/sf/sou111>.
- Gibb, A.A. 1997. "Small Firms' Training and Competitiveness: Building upon the Small Business as a Learning Organization." *International Small Business Journal* 15(3):13–29. <https://doi.org/10.1177/0266242697153001>.
- Glasser, I. 1988. "Affirmative Action and the Legacy of Racial Injustice." In *Eliminating Racism: Profiles in Controversy*, ed. P.A. Katz and D.A. Taylor, 341–357. New York: Plenum Press. https://doi.org/10.1007/978-1-4899-0818-6_18.
- Goodman, J.S., D.L. Fields, and T.C. Blum. 2003. "Cracks in the Glass Ceiling: In What Kinds of Organizations Do Women Make It to the Top?" *Group & Organization Management* 28(4):475–501. <https://doi.org/10.1177/1059601103251232>.
- Harvard Law Review. 1989. "Rethinking Weber: The Business Response to Affirmative Action." *Harvard Law Review* 102(3):658–71. <https://doi.org/10.2307/1341374>.
- Hendrickson, L.U., and J. Psarouthakis. 1998. *Dynamic Management of Growing Firms: A Strategic Approach*. 2nd ed. Ann Arbor: University of Michigan Press.
- Hou, F., and S. Coulombe. 2010. "Earnings Gaps for Canadian-Born Visible Minorities in the Public and Private Sectors."

- Canadian Public Policy/Analyse de politiques* 36(1):29–43. <https://doi.org/10.3138/cpp.36.1.29>.
- Innovation, Science and Economic Development Canada. 2016. *Key Small Business Statistics*. Cat. No. Iu186-1E-PDF. Ottawa: Innovation, Science and Economic Development Canada. At [https://www.ic.gc.ca/eic/site/061.nsf/vwapj/KSBS-PSRPE_June-Juin_2016_eng-V2.pdf/\\$file/KSBS-PSRPE_June-Juin_2016_eng-V2.pdf](https://www.ic.gc.ca/eic/site/061.nsf/vwapj/KSBS-PSRPE_June-Juin_2016_eng-V2.pdf/$file/KSBS-PSRPE_June-Juin_2016_eng-V2.pdf).
- Kaas, L., and C. Manger. 2010. "Ethnic Discrimination in Germany's Labour Market: A Field Experiment." *German Economic Review* 13(4741):1–20.
- Kang, S.K., K.A. DeCelles, A. Tilcsik, and S. Jun. 2016. "Whitened Résumés: Race and Self-Presentation in the Labor Market." *Administrative Science Quarterly* 61(3):469–502. <https://doi.org/10.1177/0001839216639577>.
- Keung, N. 2017. "Ottawa Pilots 'Name-Blind' Recruitment to Reduce 'Unconscious Bias' in Hiring." *Toronto Star*, April 20.
- Konrad, A.M., and F. Linnehan. 1995. "Formalized HRM Structures: Coordinating Equal Employment Opportunity or Concealing Organizational Practices?" *Academy of Management Journal* 38(3):787–820. <https://doi.org/10.2307/256746>.
- Li, P.S., and E.X. Li. 2013. "Decomposing Immigrants' Economic Integration in Earnings Disparity: Racial Variations in Unexpected Returns." *Canadian Ethnic Studies* 45(3):81–94. <https://doi.org/10.1353/ces.2013.0045>.
- Marlow, S., and D. Patton. 1993. "Managing the Employment Relationship in the Smaller Firm: Possibilities for Human Resource Management." *International Small Business Journal* 11(4):57–64. <https://doi.org/10.1177/026624269301100404>.
- Neumark, D. 2012. "Detecting Discrimination in Audit and Correspondence Studies." *Journal of Human Resources* 47(4):1128–57.
- Oreopoulos, P. 2011. "Why Do Skilled Immigrants Struggle in the Labor Market? A Field Experiment with Thirteen Thousand Resumes." *American Economic Journal: Economic Policy* 3(4):148–71. <https://doi.org/10.1257/pol.3.4.148>
- Palameta, B. 2007. "Economic Integration of Immigrants' Children." *Perspectives on Labour and Income* 8(10):5–16. Statistics Canada Cat No. 75-001-XIE. At <https://www.statcan.gc.ca/pub/75-001-x/2007110/article/10372-eng.pdf>.
- Pendakur, K., and R. Pendakur. 2002. "Colour My World: Have Earnings Gap for Canadian-Born Ethnic Minorities Changed over Time?" *Canadian Public Policy/Analyse de politiques* 28(4):489–512. <https://doi.org/10.2307/3552211>.
- Pendakur, K., and R. Pendakur. 2007. "Minority Earnings Disparity Across the Distribution." *Canadian Public Policy/Analyse de politiques* 33(1):41–62. <https://doi.org/10.3138/cpp.v33.1.041>.
- Pendakur, K., and R. Pendakur. 2011. "Color by Numbers: Minority Earnings in Canada 1995–2005." *Journal of International Migration and Integration* 12(3):305–29.
- Pfeffer, J. 1994. *Competitive Advantage through People*. Boston: Harvard Business School Press.
- Reskin, B.F. 2000. "The Proximate Causes of Employment Discrimination." *Contemporary Sociology* 29(2):319–28. <https://doi.org/10.2307/2654387>.
- Skuterud, M. 2010. "The Visible Minority Earnings Gap across Generations of Canadians." *Canadian Journal of Economics/Revue canadienne d'économique* 43(3):860–81. <https://doi.org/10.1111/j.1540-5982.2010.01598.x>.
- Statistics Canada. 2013. *Immigration and Ethnocultural Diversity in Canada: National Household Survey, 2011*. Cat. No. 99-010-X2011001. Ottawa: Statistics Canada. At <http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-010-x/99-010-x2011001-eng.cfm>.
- Whittington, R. 1993. *What Is Strategy and Does It Matter?* London: Routledge.