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Why is Immigrants' Access to Employment lower in Montreal than in Toronto?[*]

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Abstract

This paper explores reasons why the employment rate gap between immigrants and Canadian born individuals is larger in Montreal than in Toronto. A major reason is language: relative to Canadian born individuals, immigrants in Montreal are significantly less likely to know French than their Toronto counterparts to know English and their knowledge of French is less rewarded by employers than their Toronto counterparts' knowledge of English. We also find that holding other factors constant, the performance of immigrants according to their countries of origin is remarkably similar in Montreal and Toronto: in both metropolitan areas, immigrants from Europe and India generally perform better than immigrants from China, Taiwan and Muslim countries. While we do not find any evidence that Quebec's different immigration policy is causing the larger immigrant employment rate gap in Montreal, we cannot rule out the possibility that immigrants would be subject to more labour market discrimination in Montreal than in Toronto. However, this discrimination would be French language related as opposed to being ethnicity related. Results are generally similar for both male and female immigrants.

Key words: *Employment rate differentials, immigrants vs. Canadian-born individuals, Montreal and Toronto, immigration policies.*

JEL Classification: J200.

Résumé

Ce document explore les raisons pour lesquelles l'écart de taux d'emploi entre les immigrants et les personnes nées au Canada est plus grand à Montréal qu'à Toronto. Une raison importante est la langue : par rapport aux Canadiens de naissance, les immigrants à Montréal sont beaucoup moins susceptibles de connaître le français que leurs homologues à Toronto de connaître l'anglais, et leur connaissance du français est moins récompensée par les employeurs que la connaissance de l'anglais des immigrants à Toronto. Nous trouvons également que, toutes choses égales par ailleurs, la performance des immigrants selon le pays d'origine est remarquablement similaire à Montréal et à Toronto : dans les deux régions métropolitaines, les immigrants de l'Europe et de l'Inde ont en général une meilleure performance que ceux de Chine, de Taïwan et des pays musulmans. Bien qu'il n'y ait pas de preuve que la politique d'immigration spécifique du Québec soit la cause du plus grand écart de taux d'emploi à Montréal, nous ne pouvons pas exclure la possibilité qu'il y ait une plus grande discrimination sur le marché du travail contre les immigrants à Montréal qu'à Toronto. Toutefois, cette discrimination serait liée à la langue plutôt qu'à l'ethnicité. Les résultats sont généralement similaires pour les hommes et pour les femmes.

Mots clés: *Différences de taux d'emploi, immigrants versus personnes nées au Canada, Montréal et Toronto, politiques d'immigration.*

Classification JEL: J200.

1. Introduction

It is a truism that Canada is a nation of immigrants. For example, Statistics Canada estimates that net international immigration contributed to about two-thirds of Canada's population growth between 2001 and 2006, and that it could become the only source of population growth by about 2030 (Statistics Canada 2007). While increasing immigration may not be the panacea to Canada's population aging challenges that it is sometimes played up to be,[1] the fact is that it has been and will probably remain an important pillar of Canada's governments labour market strategy for the foreseeable future (as a point of fact, since the 2006 budget, federal funding for immigrant related issues has increased by more than $400 million a year). In that context, an important gauge of policy success is whether or not immigrants are as well integrated in the labour market as their Canadian born counterparts and, if it is not the case, what are the reasons for that.

As a province of Canada, Quebec shares similar demographic characteristics to those of the rest of the country and immigration is also seen as an important element of future labour market makeup. But Quebec faces further challenges because it has to integrate its immigrants to a culture that is different from the dominant one on the continent. While immigrants in the rest of Canada naturally tend to assimilate to the English language, those in Quebec often face situations where English and French are in competition. This creates a different dynamics for the economic integration of immigrants. It has recently been noticed (see Boudarbat and Boulet 2010, Nadeau and Seckin 2010) that immigrants in Quebec do not perform as well as immigrants elsewhere in Canada compared to their Canadian born counterparts.

Two key measures of labour market integration for immigrants are the employment rate gap (which is the difference between the employment rate of immigrants and that of Canadian born individuals) and the wage gap (which is the relative difference between the average wage of immigrants and that of Canadian born individuals). Most studies in the past have focused on the immigrant wage

[1] See, for example, Mérette (2009) for a sobering assessment of the role that increased immigration could play in reducing the negative welfare impact of population aging in Canada.

gap.[2] They have generally found that the wage gap between Canadian born and immigrant workers is mostly due to immigrants' poorer language skills and the lack of recognition of immigrants' foreign experience and education. Discrimination is generally not ruled out.

This paper analyzes and compares the employment rate gap between immigrants and Canadian born individuals in the Montreal and Toronto metropolitan areas.[3] Those regions are chosen because they are the main places of settlement of immigrants in Quebec and in Ontario. The focus is on employment, rather than on wages, because we observe (see below) that immigrants' access to employment relative to Canadian born individuals is much lower in Montreal than in Toronto, while the wage gap is actually slightly larger in Toronto than in Montreal.

From a policy point of view, this analysis can especially be a useful exercise for Quebec for two (related) reasons. First, since Quebec's population is aging more rapidly than that of the rest of Canada (ROC), successful integration of immigrants in Quebec is even more important than that in the ROC—it is indeed ironic that the place in Canada where immigration could provide the largest economic benefit is the one where immigrants perform the most poorly. Second, since Quebec has a different immigration policy than the ROC, it is important for Quebec to understand why Montreal is less effective in attracting successful immigrants than Toronto so that it can adjust its selection criteria accordingly, if possible. We investigate a number of explanations in that regard, including: the extent to which immigrants in Montreal have poorer languages skills than immigrants in Toronto; the extent to which immigrants in Montreal have less transferable human capital than immigrants in Toronto because of their countries of origin; whether Quebec's immigration policy puts too much emphasis on French skills and not enough on "other skills;" and the extent to which immigrants might be more discriminated against in Montreal than in Toronto.

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[2] For studies of the causes of the wage gap between immigrant and Canadian born workers, see, for example, Bloom, Grenier and Gunderson (1995), Schaafsma and Sweetman (2001), Aydemir and Skuterud (2005), Frenette and Morrissette (2005), Picot and Sweetman (2005), Picot and Hou (2009) and Green and Worswick (2010).

[3] Note that this study is not the first to compare immigrant employment rate gap issues between Quebec and the rest of Canada (see, for example, Boudarbat and Boulet 2010). However, to our knowledge, there is no other study comparing the sources of the immigrant employment rate gap in Montreal with those in Toronto, and doing so in a systematic manner.

This paper is organized as follows. Section 2 describes the data used and discusses summary statistics. Section 3 proposes explanations for the observed difference. Section 4 presents a variant of the Blinder-Oaxaca decomposition method to statistically validate these explanations. Section 5 presents the empirical results and Section 6 concludes.

2. Data and Descriptive Statistics

The data for our analysis come from the Statistics Canada 2006 Microdata Masterfile. The advantage of this dataset is that it provides a very large sample of Canadian born individuals and of immigrants, with very detailed information on the latter's countries of origin. To eliminate as many extraneous factors as possible, the sample is restricted to working age men and women living in the metropolitan areas of Montreal and Toronto, working age being defined as ages 18 to 64. Excluded from the sample are non-permanent residents (foreign students, workers with temporary permits and those waiting to receive the status of refugee) and immigrants who arrived in 2005 and 2006 (because of our definition of full-time full-year work during the year 2005). Appendix A provides a detailed description of the variables used in our analysis.

< Table 1 approximately here >

< Table 2 approximately here >

Key statistical characteristics of the samples are reported in Table 1 and Table 2. The samples are divided between males and females, Canadian Born and Immigrants, and Montreal and Toronto. Among the many features that are shown, two facts from Table 1 and Table 2 will play a key role in our analysis:

- Immigrants in Toronto are more likely to know the predominant language of work where they live than immigrants in Montreal. For example, 96.4 percent of male immigrants living in Toronto know English compared with 80.4 percent of male immigrants knowing French in Montreal.

- Immigrants living in Toronto come from very different countries than those living in Montreal. For example, compared with male immigrants in Montreal, male immigrants in Toronto are more than twice as likely to come from East and South-East Asia (45.4 percent compared with 20.4 percent) and half as likely to come from Africa, the Middle-East and Western Central Asia (12.4 percent compared with 28.9 percent).

Table 3 reports indicators of the integration of immigrants in the Montreal and Toronto labour markets in 2005, for both males and females. The indicators are expressed as differences between the values for immigrants and those for the Canadian born; a negative entry meaning a disadvantage for immigrants. A few observations are in order. First, as it has been pointed out elsewhere (see, for example, Boudarbat and Boulet, 2010), immigrants in both metropolitan areas are significantly less likely to be employed full-time full-year than their Canadian born counterparts, and when they work, they earn considerably less than the latter (for example, in Montreal, male immigrants are 7.2 percent less likely to be fully employed and earn almost 26 percent less than their Canadian born counterparts).

< Table 3 approximately here >

A second observation is that, relative to their Canadian counterparts, immigrants are much less likely to be fully employed in Montreal than in Toronto (almost 6 percentage points less likely in fact, as shown in the last row). In contrast, the wage gap between immigrants and Canadian born individuals is actually smaller in Montreal than in Toronto. Thus, access to employment seems to be the major reason why the proportion of immigrants who are below the low-income cut-off is much larger in Quebec than in Ontario.[4]

Most previous studies comparing the integration of immigrants in Quebec and Ontario labour markets have focused on explaining the sources of the wage gap (see, for example, Grenier 2001 and

[4] For example, Boudarbat and Boulet (2010) estimate that in 2000, the proportion of immigrants who were below the low-income cut-off was 31 percent in Quebec and 18.6 percent in Ontario.

Nadeau and Seckin 2010). This paper focuses however on explaining the sources of the employment rate gap.

3. Elements of explanation for the difference in immigrant employment rate gaps

Conceptually, one would expect that the immigrant employment rate gap would be affected to a large extent by the same factors as the immigrant wage gap. Therefore, based on the literature on the sources of the immigrant wage gap, we can think of at least four possible reasons why immigrants could have more difficulty finding full-time employment in Montreal than in Toronto. First, there is the language issue. Increasingly, the knowledge of French is required to be economically successful in Quebec (see, for example, Albouy 2008 and Nadeau 2010). While the proportion of immigrants who can speak French in Quebec has significantly increased over the last thirty years (see, for example, Boudarbat and Boulet 2010), compared to Canadian born individuals, there are still fewer immigrants who can speak French in Montreal than there are who can speak English in Toronto. For example, according to Table 1, 80.2 percent of male immigrants in Montreal can speak French (compared to 97.7 percent of Canadian born males) while 96.4 percent of male immigrants in Toronto can speak English (compared to 99.9 percent of Canadian born males). These results suggest that immigrants may not meet the language requirements of Montreal's labour market as well as they meet those of Toronto's, which could explain some of the differential between the employment rate gap in Montreal and that in Toronto.

Second, the immigrant employment rate gap in Montreal might be larger than that in Toronto because of the different countries of origin of immigrants. Because of its language situation, Quebec has always attracted fewer immigrants from countries that have cultures and education systems very similar to those of the rest of Canada (countries such as the U.S. and U.K.). Among the more recent cohorts, there are also fewer immigrants in Quebec from Asia and more from Africa than in the rest of Canada (see, for example, Boudarbat and Boulet 2010). The result of that may be that the skills that immigrants in Montreal have acquired in their countries of origin are less transferable than those of immigrants in

Toronto.[5] This theory gets some credence if we compare the gross employment rates of immigrants by country of origin. Indeed, according to Table 4, male immigrants from 8 out of the 10 most common countries of origin in Montreal have lower employment rates than their Canadian born counterparts, while the equivalent figure is five in Toronto.

< Table 4 approximately here >

A third possible reason is that the government of Quebec has an important control of its immigration policy, while in the rest of Canada (ROC), the Federal Government has until recently been the sole actor of that policy. Indeed, since the Cullen-Couture agreement in 1978, Quebec has been using its own points system to select independent immigrants, taking into account various economic and social factors to assess their potential ability to integrate and prosper in the province.[6] And, since the Canada-Quebec Accord Immigration Accord in 1991, Quebec has had the sole responsibility to select all independent immigrants and refugees who want to live in that province.[7] While Quebec's selection criteria have many of the same features as Canada's selection criteria, they differ in several respects. A key difference is that Quebec has historically put a lot more importance on the knowledge of French upon prospective immigrants than Canada. For example, currently, under Quebec's selection grid for independent immigrants, the knowledge of French accounts for about 25 per cent of the passing grade while under Canada's selection grid, it accounts for about 12 per cent (see Table 5). Also, it has occurred in the past that Quebec would put relatively less weight on education and workplace experience and more

[5] According to the *Times Higher Education-2008 QS World University Rankings*, six of the top 100 universities in the world are located in Canada, 36 in the U.S., 17 in the U.K., 19 in the rest of Europe, 14 in Asia and eight in Australia and New Zealand. None are from Africa, Central and South America, which represent a larger source of immigrants for Montreal than for Toronto.

[6] There are three main classes of immigrants in Canada: the independent class, the family reunification class and the refugee class. Canada and Quebec have had immigration agreements since 1971. The Cullen-Couture Agreement came into effect on March 30, 1979. It was preceded by the Lang-Cloutier (1971) and Andras-Bienvenue (1975) agreements.

[7] For good summaries of Quebec's responsibilities in terms of immigration policy, see Becklumb (2008) and DeVoretz and Pivnenko (2008).

weight on certain occupations than Canada in selecting its immigrants. Because of these differences, Quebec might have been less effective in attracting successful immigrants than the ROC, which could help explain the larger employment rate gap in Montreal.

< Table 5 approximately here >

Finally, a fourth possible reason is discrimination. Some studies hint to the possibility that immigrants may be discriminated against in Canada in general and in Quebec in particular (see, for example, Bloom, Grenier and Gunderson 1995; Pendakur and Pendakur 2008; and Boudarbat and Boulet 2010). In light of the Bouchard-Taylor Commission, the "reasonable accommodation crisis," and the recent burka ban for public employees in Quebec, and the way these issues have sometimes been portrayed in media outside Quebec, a legitimate question is whether immigrants could be more discriminated against in Montreal than in Toronto.

The next section presents a statistical framework to measure the extent to which each of these possible reasons explains the difference in the immigrant rate gaps.[8]

4. A statistical framework to explain the difference in immigrant wage gaps

The statistical framework used in this paper is based on the well-known Blinder-Oaxaca decomposition method (see Blinder 1973, Oaxaca 1973). We assume two distinct labour markets: one for Montreal and the other one for the Toronto. As in Nadeau and Seckin (2010), we also allow for the possibility that the employment determination process within these markets is different between immigrant and Canadian born individuals.

[8] Another possible explanation for the larger employment rate gap in Montreal than in Toronto is the difference in labour market institutions. According to Antecol, Kuhn and Trejo (2003), the immigrant employment rate gap should be larger in jurisdictions (such as Montreal) with higher unionization rates and more generous welfare income support programs (see Statistics Canada 2006 for information on provincial unionization rates and National Council of Welfare 2006 for information on provincial welfare income support). While this explanation seems to be supported by the data (see Table 3), its relative significance cannot be distinguished from that of other factors because of statistical identification issues and is therefore not assessed in this paper.

Let the superscripts *B* and *I*, and the subscripts *M* and *T*, respectively denote Canadian-born, Immigrant, Montreal and Toronto; *X* denote a vector of mean human capital determinants of employment and other control variables (*e.g.*, education, potential experience, language skills); and, *Y* denotes a vector of mean immigrant specific characteristics (*e.g.*, source country, years since immigration, Canadian citizenship, location of highest degree). Then, assuming linear probability models,[9] for a given census year, in Montreal say, the employment rates of Canadian born workers and immigrant workers can be respectively expressed as

$$p_M^B = X_M^B \beta_M^B \tag{1}$$

and

$$p_M^I = X_M^I \beta_M^I + Y_M \gamma_M \tag{2}$$

where β and γ are vectors of OLS estimated coefficients. As a result, the immigrant employment rate gap within a labour market, Montreal's labour market for example, can be decomposed as the sum of three components:

$$(p_M^I - p_M^B) = (X_M^I - X_M^B)\beta_M^B + X_M^I(\beta_M^I - \beta_M^B) + Y_M \gamma_M \tag{3}$$

The first term in the decomposition (3) is the *explained* component of the employment rate gap. This component measures the portion of the employment rate gap due to differences between the observed attributes of immigrants and those of Canadian born workers, evaluated with the coefficients of the latter. The second term in equation (3) is the *unexplained* component of the employment rate gap. The third term reflects the impact of immigrant specific characteristics.

[9] Alternatives to assuming linear probability models would be to assume probit or logit models. However, for our purpose, the former presents at least two advantages over the latter. One is that Blinder-Oaxaca decompositions are computationally significantly less demanding under linear probability models than under the alternatives, which is a serious consideration in our case as we are dealing with a sample size in excess of one million observations of close to one hundred variables. Another advantages is that the Blinder-Oaxaca decomposition has more attractive properties under linear probability models than under probit or logit models. In particular, the results of the decomposition do not depend on the ordering of the variables (see Fairlie 2005) and the predicted probabilities evaluated at the means of the independent variables are equal to the *sample* probabilities. We believe that these advantages outweigh the lower statistical efficiency of linear probability models (especially in the context where the loss in efficiency is probably minimal in the first place given the very large sample size).

4.1 Estimation considerations

Four equations must be estimated for each census year: one Canadian-born worker equation and one immigrant worker equation for each labour market. Appendix A defines the variables used in the analysis and Appendix B reports the associated coefficient estimates. A few observations are in order.

First, the vector *X* includes standard variables that affect the probability that someone will work. As an analytical framework, we can think of a person holding a job if the wage offered on the market is greater than that person's reservation wage. The offered wage depends on a person's value on the labour market, which is basically human capital. Therefore, all the variables that usually enter a human capital earnings function should be included in the employment equation. The reservation wage (the wage above which a person chooses to work) depends on a person's preferences and budget constraints. It is related to family characteristics that can affect the decision to seek full-time employment, such as the number and age of children at home and the availability of other sources of income. Note that some of the variables that affect the offered wage can also affect the reservation wage, so that what we basically estimate is a reduced form equation.

Concerning the language characteristics, we include both the ability to speak the two official languages and the language spoken at home, whether it is English, French or a non-official language. The rationale for using those two variables is that while in the end, in Canada, what is generally key from a labour market point of view is whether a worker can speak at least one of the official languages, controlling also for the language spoken at home is an indirect way of controlling for the fluency in speaking an official language.

As expected, the choice of the variables included in the immigrant specific characteristic vector *Y* draws heavily from the literature on the determinants of immigrant wages.

- Differences in culture, tradition and religion could have an effect on the employment rate of immigrants, both through the offered wage (if there is discrimination) and the reservation wage (if preferences towards work vary). Therefore, we include a set of 47 *Source country* dichotomous variables. The reference category is the U.S.

- A key determinant in the labour market integration of immigrants in Canada is the relative quality of education (see, for example, Sweetman 2004). To take account of the possibility that a degree earned in a foreign country may not be recognized by Canadian employers as much as a degree earned in Canada, we include a dichotomous variable that takes the value 1 if the highest degree earned by an immigrant was earned in a foreign country and 0 otherwise.
- To reflect the possibility that while the labour market integration of immigrants at the time of immigration may fall short of that of similarly skilled Canadian born individuals, it can catch-up over time (see Chiswick 1978, Bloom, Grenier and Gunderson 1995), we allow for the employment rate of immigrants to vary with the number of years since immigration and its square.
- A number of empirical studies show that citizenship increases earnings even after correcting for length of time since immigration (see, for example, Bratsberg, Ragan, Nasir and Zafar 2002, DeVoretz and Pivnenko 2006 and Nadeau and Seckin 2010).[10] To allow for the possibility that it could also increase the employment rate, we incorporate in the vector *Y* a dichotomous variable that takes the value 1 if an immigrant is a Canadian citizen and 0 otherwise.

Finally, we note that the coefficient estimates of the human capital and family related variables in the regressions are generally of the expected signs (see Tables B1a and B1b in Appendix B). Of particular interest are the magnitudes of the coefficient estimates of the *Knowledge of official languages*, *Country of origin* and *Citizenship* variables. According to Table B1a, beside school attendance, the most important determinant of whether an immigrant is employed or unemployed is the knowledge of the language prevailing in the relevant labour market. Indeed, in Montreal, a male immigrant is almost 10 percentage points less likely to be employed if he cannot speak either French or English (the equivalent figure is 4.5

[10] A number of rationales have been proposed to explain why citizenship could increase earnings. One is because it widens the immigrant's job market (for example, in Canada, citizenship is required for all Canadian federal jobs and it allows foreign-born Canadian residents to obtain TN visas to work in the U.S.). Alternatively, it may provide a signal of stability to the employers—reflecting a commitment to stay in Canada and to acquire additional skills valued in Canada's labour market. In addition, citizenship may be correlated with wages because of unmeasured productivity characteristics of those who become citizens. The literature is not clear which one of these rationales is most appropriate.

for female immigrants).[11] Likewise, in Toronto, an immigrant (whether male or female) who does not know English is about 10 percentage points less likely to be employed. It is interesting to note though that in Toronto, the likelihood of a unilingual French immigrant of being employed is even smaller than that of an immigrant who does not know any official language.

With regards to the coefficients of the *Country of origin variables* (see Table B1b in Appendix B), we observe that controlling for human capital and family situation variables can significantly alter the perception we have of the employment performance of certain immigrant groups. A case in point is that of male immigrants from Haiti living in Montreal. If we compare *gross* employment rates, we find that they are on average 7.6 percentage points less likely to be employed than their Canadian born counterparts (see Table 4). However, once we control for standard determinants of employment, we find that statistically speaking, they perform as well as their Canadian born counterparts: according to Table B1b in Appendix B, male immigrants from Haiti in Montreal are only 2.1 percentage points less likely on average to be employed than similarly skilled Canadian born males, which is statistically not significantly different from zero.

We also note that the employment rate of immigrants significantly varies across countries of origin, even after controlling for standard determinants of employment. However, there are some common themes. One of them is that except for female Russian immigrants in Montreal, statistically speaking, immigrants from Europe perform as well as or better than similarly skilled Canadian born individuals (whether males or females, and whether in Montreal or Toronto). Immigrants from India also perform well across the board.

Another common theme is that after controlling for standard determinants of employment, immigrants from Muslim countries (that is, countries for which the majority religion is Islam) generally

[11] Note also that our results differ somewhat from those from Charles Castonguay (as reported in Gravel 2010) who finds that it is necessary for immigrants in Montreal to know English to be successful in the labour market. What we find is that knowing French is as important as knowing English to be employed in Montreal. As a point of fact, we find that statistically speaking, immigrants (whether male or female) who know only French are just as likely as immigrants who only know English to be employed in Montreal. Further, we find that knowing French actually increases the probability of being employed by 5.9 percentage points for a male immigrant who already knows English (7.4 percent for a female immigrant).

perform the worst. In fact, according to Table B1b, focusing on males, among the 10 countries of origin with the worst net employment rates performance in either Montreal or Toronto, seven of them are Muslim[12] (the equivalent figure is six for females). And none of them are among the 10 countries of origin with the highest net employment rates in any of the labour market studied.[13] It is also interesting to note that whether in Montreal or Toronto, males immigrants from China and Taiwan generally have significantly lower net employment rates than their Canadian born counterparts.

Our last observation about the estimated coefficients concerns the *Citizenship* effect. As expected, being a Canadian citizen helps in finding full-time employment. However, what is surprising is the magnitude of this effect. As a point of comparison, all other things being the same, being a Canadian citizen increases the likelihood of being fully employed for a male immigrant by at least four times as much as that of having graduated from a Canadian institution (as opposed to having graduated from a foreign institution).

5. Results of the decomposition

We first discuss the sources of the immigrant employment rate gap in Montreal and that in Toronto; we then examine differences between the two labour markets in that respect.[14]

< Table 6 approximately here >

[12] The seven Muslim countries that are among the ten countries whose immigrants have the worst net employment rate performance in Montreal are Algeria, Morocco, Afghanistan, Iran, Iraq, Pakistan and Bangladesh. The equivalent list for Toronto contains the same countries except that Egypt replaces Morocco.

[13] This is not to say though that all immigrants from Muslim countries perform poorly. For example, immigrants (both males and females) from Egypt in Montreal perform as well as Canadian born individuals.

[14] As shown in Oaxaca and Ransom (1999), the detailed decomposition of the unexplained component in (3) is not invariant to the choice of reference groups when dichotomous variables are used in the regression equations. To solve this problem, we follow Gardeazabal and Ugidos (2004) and Yun (2005) and restrict the sum of the estimated coefficients of each set of dichotomous variables to zero in performing the decomposition (3).

5.1 The sources of the immigrant employment rate gap in Montreal

Selected elements of the decomposition (3) for the immigrant employment rate gap in Montreal are reported in Table 6. We first note that the sources of the immigrant employment rate gap for males (top panel of Table 6) are essentially the same as those for female workers (bottom panel of Table 6). A major reason why the employment rate of immigrants in Montreal is lower than that of Canadian born individuals is language. As pointed out in Section 3, the language make-up of immigrants in Montreal is much less French than that of the general population. Furthermore, the rewards for knowing French are much lower for immigrants than for Canadian born individuals. For example, compared to knowing only English, knowing only French slightly reduces the probability of being employed for immigrant males while it increases the probability of being employed by 7.3 percentage points for Canadian born males (see Table B1a). Similarly, an immigrant male who knows both official languages is 5.9 percent more likely to be employed than his English only counterpart, while the equivalent figure is 9.7 percentage points for a Canadian born individual. All in all, we estimate that if immigrants were as likely to know French and as rewarded for knowing French as their Canadian born counterparts, then their employment rate would be 4.5 percentage points higher for males and 2.8 percentage points higher for females (see Table 6). This means that the employment rate gap would be reduced by more than 60 percent for males and by about 25 percent for females.

Another major reason why the employment rate of immigrants is lower than that of Canadian born workers is that the experience (here proxied by Age – 18) of immigrants is not valued as much as the experience of Canadian born workers, which is consistent with findings in the literature on immigrant wages where the returns to pre-immigration labour market experience are generally thought to be lower than the returns to domestic experience (Schaafsma and Sweetman 2001, Frenette and Morissette 2003, Aydemir and Skuterud 2005 and Green and Worswick 2010). For example, using coefficient estimates in Table B1a in the Appendix B, we find that an additional year of experience will increase the probability of a 25 year old male to be fully employed by 0.021 if the individual is Canadian born, compared with 0.014 if the individual is an immigrant and this additional year of experience is acquired outside Canada (0.022

if acquired in Canada). Overall though, the *Years since immigration* effect more than compensates for the *Experience* effect for males and just about compensates that for females.

It is also interesting to note that while a degree earned in a foreign country seems to be less valued by Canadian employers than a degree earned in Canada (see Table B1A), overall, *Education* is not a factor in explaining the lower employment rate of immigrants in Montreal. Indeed, male immigrants, for example, are generally more educated and there is no evidence that, overall, the quality of their education (as measured by the sum of the *Education* component of the unexplained gap and the *Source country of degree* effect in Table 6) is lower than that of their Canadian born counterparts.

Finally, we observe that the *Country of origin* effect accounts for about one-third of the immigrant employment rate gap for males (less than twenty percent for females). Interestingly, about ninety percent of the *Country of origin* effect is associated with Muslim countries (2.2 percentage points out of 2.5 percentage points for males and 1.9 percentage points out of 2.1 percentage points for females). More work would need to be done to ascertain whether or not this reflects labour market discrimination against Muslim immigrants in Montreal.

5.2 The sources of the immigrant employment rate gap in Toronto

Among the specific sources of the immigrant employment rate gap that can be identified by our model, *Country of origin* is the most significant one for males in Toronto. In fact, this variable explains more than one hundred percent of the gap (see Table 6). And, as in Montreal, most of this effect is associated with Muslim countries. For females though, the most important source of the immigrant employment rate gap is *Language*, which accounts for about 80 percent of the gap. Paradoxically, for males, *Language* actually subtracts 4.1 percentage points from the immigrant employment rate gap; this reflects, in part, the fact that all other things equal, in Toronto, knowing English increases much more the probability of being employed for immigrants than for Canadian born individuals.[15]

[15] For males in Toronto, in the regressions where there are no omitted dichotomous variables but where the sum of the estimated coefficients of each set of dichotomous variables is restricted to zero, the coefficient associated with

As in Montreal, whether for males or females, the experience of immigrants in Toronto is not valued as much as that of Canadian born individuals. For example, using coefficient estimates in Table B1a in the Appendix B, we find that an additional year of experience will increase the probability of a 25 year old male to be fully employed by 0.024 if the individual is Canadian born, compared with 0.019 if the individual is an immigrant and this additional year of experience is acquired outside Canada (0.024 if acquired in Canada). Also as in Montreal, the *Years since immigration* effect significantly compensates for the *Experience* effect.

5.3 Explanations for the larger immigrant employment rate gap in Montreal

This section tests the legitimacy of some of the possible explanations for the larger immigrant employment rate gap in Montreal that were discussed in Section 3.

5.3.1 The role of languages skills

By far, the major reason why the male immigrant employment rate gap is larger in Montreal than Toronto is language. Indeed, according to figures in Table 6, if the language profile of male immigrants in Montreal was as French as that of Canadian born individuals, and if their knowledge of French was as rewarded as that of their Canadian born counterparts, then the male employment rate gap in Montreal and, by extension, the difference in the male employment rate gap between Montreal and Toronto would be reduced by 4.5 percentage points (or more than 80 percent in the latter case). The equivalent figures for female immigrants are 2.8 percentage points and 50 percent respectively.

5.3.2 The role of different countries of origin

As discussed in Section 3, comparing the gross employment rate gap of immigrants by country of origin might suggest that one reason why immigrants are less integrated in Montreal's labour market than in

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the variable *Knowledge of official language-English only* is 0.075 for immigrants while it is 0.022 for Canadian born individuals.

Toronto's is because of the different countries of origin of immigrants to these two cities. Results in Table 6 provide some support for this notion. While for males, the *Country of origin* total effect is statistically non-significantly different from zero, it explains almost 30 percent of the difference in employment rate gaps for females (as a point of fact, differences in countries of origin is the most important identifiable explanation for the difference in employment rate gaps for females). It is interesting to note though that for both males and females, the fact that Montreal attracts more immigrants from Muslim countries than Toronto explains a significant portion of the difference in immigrant employment rate gaps between these two cities: 0.9 percentage point (or about 16 percent of the total difference) for males and 0.7 percentage point (or about 12 percent of the total difference) for females.

5.3.2 The role of immigration policies

Following the discussion in Section 3, a key issue is whether Quebec's immigration policy has been too willing to sacrifice employability for French language skills in selecting its immigrants. Also, we need to keep in mind that the different emphasis on language skills, while being the most important, is not the only aspect in which Quebec's immigration policy differs from that of Canada. A way to assess the *overall* effectiveness of Quebec's immigration policy is to see how well the immigrants living in Toronto would have performed if they had been in Montreal's labour market. If their employment rate would have been higher than that of immigrants living in Montreal, then this suggests that at least from a labour market integration point of view, Quebec should have followed Canada's immigration policy. Conversely, if their employment rate would have been lower than that of immigrants living in Montreal, then this suggests that Quebec's immigration policy is more aligned with Quebec's labour market reality than Canada's immigration policy. This is what we find using our statistical model: in 2006, if immigrants living in Toronto had lived in Montreal instead, then the immigrant employment rate in Montreal would have been 1.5 percentage point lower for males (0.485 instead of 0.500) and 1.8

percentage point lower for females (0.321 instead of 0.339).[16] The major factor driving this result is by far language. Immigrants in Montreal are a much better fit from a language point of view than Toronto's immigrants would be if they lived in Montreal. In fact, our model estimates that if immigrants in Montreal had the same language characteristics as immigrants in Toronto, then the employment rate of immigrants in Quebec would be 3.4 percentage point lower for males (3.7 percentage point lower for females).

That the immigrant employment rate of immigrants in Montreal is estimated to be significantly smaller with the current immigrants than it would be with the immigrants living in Toronto suggests two things:

- It makes sense to have a different immigration policy for Quebec not only from a cultural point of view, but also from an economic point of view.[17]
- Quebec's selection system may or may not be optimal, but it results in immigrants who are better fits to Quebec's labour market reality than Canada's selection system. In particular, Quebec's greater emphasis on knowing French just reflects the reality that in Quebec, knowing French is a significant determinant of success in the labour market.

These conclusions are consistent with those in Nadeau and Seckin (2010) in the context of immigrant wages.

5.3.3 The role of discrimination

The impact of discrimination on the immigrant employment rate gap can enter our model through two main channels: the *unexplained components* (which pick up the impact of differential recognition of skills by employers depending on whether a worker is an immigrant or a Canadian born individuals) and the difference in return components of the *Source county* effect (which may pick up cultural/racial minority

[16] This is done using the mean characteristics of immigrants in Toronto with the coefficients estimated for Montreal.
[17] This does not say though that this policy should be administered by Quebec, something that at this point we are agnostic about. It just says that in particular, it makes sense to have a different point system for the evaluation of prospective immigrants to Quebec than that for prospective immigrants to the ROC.

effects).[18] Note that these variables are very incomplete measures of the extent of the impact of discrimination on labour market integration as they may pick up other effects as well such as differences in motivation and transferability of skills. Nevertheless, these measures are useful because if they are not significantly different from zero, then they do not provide evidence of discrimination.

According to our model, there is some evidence that could suggest that immigrants are more discriminated against in Montreal than in Toronto and it comes not from the difference in return components of the Country of origin effect (which are in fact not statistically different from zero—and therefore lay to rest the notion that immigrants from Muslim countries may be more discriminated against in Montreal than Toronto), but from the difference in the *Majority language* component of the *Unexplained gap* (see Table 6). Whether for males or females, relative to Canadian born individuals, the French language skills of immigrants in Montreal are less recognized than the English language skills of immigrants in Toronto. This result is especially striking for immigrant males. Indeed, we find that if their knowledge of French was as recognized as that of their Canadian born counterparts, then the employment rate gap would decrease by 2.3 percentage points in Montreal, while, in Toronto, if their knowledge of English was recognized the same as that of their Canadian born counterparts, then the employment rate gap would actually increase by 5.3 percentage points. These results are intriguing. Focusing on the possible reasons why French language skills would not be as recognized for immigrants as for Canadian born individuals in Montreal,[19] we can provide a number of possible explanations. One of them is that the quality of the French language spoken in Montreal by immigrants is not as good as that spoken by Canadian born individuals (even after controlling for language spoken at home). Another one is that immigrants may not work in the same type of jobs as Canadian born individuals (for example, fewer immigrants work in the public sector). Still another possibility is that employers in Montreal may discriminate against immigrants whose only official language known is French.

[18] The reason why we did not incorporate a visible minority indicator in our regressions to assess the impact of discrimination that immigrants can be discriminated against even if they are not a visible minority.
[19] Explaining why English language skills are more recognized for immigrants than for Canadian born individuals in Toronto is even more challenging and is not addressed in this paper.

6. Conclusion

This paper explored reasons why immigrants have more difficulty integrating Montreal's labour market, (in terms of access to employment) than Toronto's labour market. A number of results stand out (for both male and female immigrants, unless specified otherwise). First, there is language. The lack of knowledge of French and of reward for knowing French is a major reason why male immigrants have a lower employment rate than Canadian born individuals in Montreal than in Toronto. If male immigrants in Montreal were as likely to know French as their Canadian born counterparts and if the quality of their French was (or was recognized by employers to be) as good as that of their Canadian born counterparts, then their employment rate would be reduced by more than 60 percent and the difference between the male immigrant employment rate gap in Montreal and that in Toronto would be reduced by 80 percent. The equivalent figures for female immigrants are 25 percent and 50 percent respectively.

A second key result is that whether in Montreal or Toronto, even after controlling for human capital and family related variables, immigrants from some countries integrate better in the labour market than immigrant from other countries. For example, all other things the same, immigrants from Europe and India generally have a higher employment rate than immigrants from China, Taiwan and Muslim countries. Interestingly though, the fact that Montreal attracts immigrants from different countries than Toronto generally explains relatively little why the immigrant employment rate gap is larger in Montreal than in Toronto (the exception to this is for males where a larger proportion of immigrants from Muslim countries in Montreal than Toronto explains about 16 percent of the difference in the immigrant employment rate gap between the two cities).

Another key result concerns the role of discrimination in explaining the larger immigrant employment rate gap in Montreal than in Toronto. We cannot rule out the possibility that immigrants could be subject to more labour market discrimination in Montreal than in Toronto. However, this discrimination would be language related as opposed to be ethnicity related. Indeed, whereas we find that immigrants from specific countries (*e*.g., immigrant from Muslim countries) are treated relatively the

same in Montreal as in Toronto, we find that knowing French in Montreal is less rewarding for immigrants than for Canadian born individuals, while knowing English in Toronto is at least as rewarding for immigrants as it is for Canadian born individuals.

Finally, we do not find any evidence that Quebec's different immigration policy has anything to do with the larger immigrant employment rate gap in Montreal. On the contrary, we find that if Montreal attracted the same kind of immigrants as Toronto, then the immigrant employment rate gap in Montreal would be larger. Greater emphasis on French skills in the selection of immigrants for Quebec is thus not only culturally but also economically justified. At this juncture though, besides attracting more immigrants who know French, a key public policy challenge for Quebec is to ensure that the French skills of its immigrants are recognized as much as those of its Canadian born population.

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APPENDIX A
DATA DESCRIPTION

Dependent variable

Our dependent variable is a dichotomous variable that takes the value of 1 if an individual worked full-time full-year in 2005. Full-time is defined as 30 hours or more a week and Full-year is defined as 48 weeks or more. We make use of the question in the Census which asked whether the weeks worked in 2005 were mainly full-time or part-time.

Independent variables that apply to the entire sample

Given that the 2006 census does not provide a value for number of years of schooling, potential experience cannot be defined the usual way as age –education – 5. So age is used as a proxy for *Potential experience* and a quadratic functional form is assumed. Furthermore, to facilitate some calculations below, age is redefined as age minus 18 (the lowest age in our sample). By doing so, the constant term of the regressions will indicate the employment rate of the 18 year old worker with value 0 for all the dichotomous variables.

Education is defined on the basis of the highest certificate, degree or diploma (not on the number of years). Five categories are defined, with the reference category being a high school graduation certificate or the equivalent. The other categories are: (1) No certificate, (2) Trade, apprenticeship, college or CEGEP certificates or diploma, (3) university certificate or diploma below bachelor level, (4) university bachelor level and (5) masters or doctorate (including medicine, dentistry and similar programs).

For language attributes, two variables are used. The first one is the *Knowledge of the official languages* (as evaluated by the respondents). The categories are (1) English only (the reference), (2) French only, (3) Both English and French, and (4) None of English and French. The second one is the *Language spoken most often at home* at the time of the census, which may indicate a better command of a language. In the Census, multiple answers (such as English and French) are allowed to that question and there is also a sub-question about a possible second language used regularly at home, which also allows multiple answers. The end result of that is somewhat complicated. Here we use a simplified version of that variable that is based only on the first part (the sub-question is not used) and that allocates multiple answers to the lower status language, with English having the highest status, French being second, and the non-official languages being third. For example, the response "English and French" is allocated to French, and the response "French and a non-official language" is allocated to the non-official languages. By doing that there are only three categories for the language used at home: (1) English (the reference), (2) French, and (3) a non-official language.

Marital status is included with two categories: married and all others (single, widowed, separated, and divorced). The latter is the reference category.

Presence of children at home also affects employment (from the supply side). The effects may differ between men and women. This variable has the following categories: (1) No children at home (the reference), (2) at least one child less than 2 (with possibly older children at home too), (3) All the children at home are between 2 and 15, and (4) all the children at home are more than 15. The categories are defined the way they are because it is expected that having young children at home will affect the time available for individuals to work outside the home (especially for women).

A dichotomous variable is defined for *School Attendance*, which takes the value one if an individual attended school during the nine months prior to the census, and the value zero if not. (This variable is expected to affect employment negatively).

Another variable that affects employment from the supply side is *Other family income*. This variable is defined as the total income of the census family minus the person's earnings (wages and salaries and self-employment income) in 2005.

Immigrant specific independent variables

All the above variables are defined for the entire sample. The ones that follow are immigrant specific (they are interacted with an immigrant dichotomous indicator).

An advantage of using the *Master File* is that all *countries of origin* of immigrants appear individually in the data base, as opposed to being aggregated as in the *Public Use* data files. For this analysis 48 countries or groups of countries are defined. We identify as many specific countries as possible, and the others are aggregated based on the region of the world. In practice, the first 15 countries in terms of the number of immigrants are specifically identified in Montreal and the first 25 in Toronto (because Toronto has a larger immigrant population). A few other countries are also identified if the sample is large enough. The list of countries is the same for both Toronto and Montreal (for purposes of comparison), which means that some countries which are not among the most important in one metropolitan area are identified if they are important in the other. For example, there are very few immigrants from Haiti in Toronto, but they are identified because that country is an important source of immigration in Montreal. The reference category for the countries is the U.S. (there are 47 dichotomous variables).

Location of highest degree is a new variable in the 2006 census. For people with postsecondary education, it indicates whether the degree was received in Canada or in another country. This variables takes the value 1 if the degree was received in a foreign country, and the value 0 otherwise (degree received in Canada or no postsecondary education).

Years since immigration and its squared are used. They are defined as 2005 minus the year the person immigrated (the year landed immigrant status was first granted).

Citizenship is a dichotomous variable taking the value 1 if the immigrant is a Canadian citizen and the value 0 otherwise (it does not exclude the fact that a person can be simultaneously a citizen of another country).

Table 1: Common Characteristics of Immigrant and Canadian Born Individuals (2006)

	Males				Females			
	Montreal		Toronto		Montreal		Toronto	
	Canadian Born	Immigrants	Canadian Born	Immigrants	Canadian Born	Immigrants	Canadian Born	Immigrants
% of Population	77.4	22.6	48.7	51.3	77.9	22.1	46.9	53.1
% Employed (full-time, full-year)	57.2	50.0	59.6	57.9	44.9	33.9	46.5	41.2
Potential experience (years)[a]	22.2	24.6	19.6	24.7	22.6	24.4	19.9	24.6
Education								
% H.S. graduation certificate	23.2	19.1	29.9	23.8	24.2	20.2	29.4	25.4
% No certificate	15.3	15.5	11.5	13.2	12.7	18.3	8.5	14.8
% College/Trade certificate	36.1	26.4	26.1	23.2	33.9	26.1	25.7	23.2
% Univ. diploma/certificate	4.7	7.2	4.1	7.4	6.2	7.8	4.5	8.1
% Bachelor's degree	15.5	20.4	21.6	22.0	18.2	19.6	25.7	21.4
% Masters or Ph.D	5.2	11.5	6.8	10.3	4.8	8.1	6.3	7.1
Knowledge of official languages								
% English only	2.5	17.9	89.1	91.4	2.3	18.5	85.2	88.9
% French only	32.2	17.8	0.0	0.1	39.5	25.5	0.0	0.1
% English and French	65.3	62.4	10.8	5.0	58.1	51.9	14.7	5.6
% None	0.0	1.8	0.1	3.5	0.0	4.1	0.1	5.5
Language spoken at home[b]								
% English	15.9	19.5	95.8	45.6	15.7	18.6	96.0	46.2
% French	82.0	30.9	0.7	0.4	82.5	28.3	0.9	0.5
% Other	2.1	50.6	3.5	54.0	1.8	53.1	3.2	53.4
Family related variables								
% Married	56.2	67.7	51.1	71.0	57.3	65.4	52.9	67.6
% Children age < 2	5.0	8.1	5.6	6.7	5.3	8.0	6.2	6.5
% Children age 2 to 15	19.0	26.4	18.7	27.6	22.4	30.0	22.4	29.0
% Children age 15+	9.7	13.7	8.4	16.7	11.8	16.4	10.8	18.1
Attend school	17.5	19.1	19.5	15.2	20.3	20.7	22.3	16.7
Sample size	169,542	49,513	146,788	154,687	177,566	50,314	149,162	168,968

[a]Potential experience is defined as (Age – 18).

[b]See data description in Appendix A.

Table 2: Distribution of Countries of Origin of Immigrants (in percent)

	Males		Females	
	Montreal	**Toronto**	**Montreal**	**Toronto**
U.S.	1.9	1.4	2.1	1.6
Central America	4.1	1.3	4.0	1.3
Haiti	7.1	0.1	9.2	0.1
Jamaica	0.6	3.9	0.9	5.1
Trinidad	0.6	2.0	0.7	2.4
Other Caribbean	1.5	1.4	2.1	1.7
Guyana	0.4	3.2	0.4	3.5
Other South-America	5.0	2.7	5.5	2.8
France	5.7	0.2	5.2	0.3
Germany	0.8	0.9	0.8	0.9
Other Western Europe	1.4	0.7	1.4	0.6
Romania	3.2	1.1	3.2	1.1
Poland	1.3	3.1	1.7	3.1
Ukraine	0.5	1.0	0.6	1.1
Russia	1.1	1.3	1.2	1.3
Hungary	0.3	0.4	0.3	0.5
Other Eastern Europe	1.2	1.2	1.1	1.2
U.K.	1.5	4.9	1.4	4.7
Other Northern Europe	0.2	0.5	0.3	0.5
Greece	2.3	1.2	2.3	1.1
Italy	6.3	4.5	5.8	3.9
Portugal	2.6	3.7	2.7	3.4
Other Southern Europe	1.3	2.7	1.3	2.5
West Africa	1.5	1.2	1.1	1.0
East Africa	1.7	2.5	1.6	2.7
Algeria	4.1	0.0	3.1	0.0
Egypt	2.0	0.7	1.8	0.5
Morocco	4.9	0.2	4.0	0.1
Other Northern Africa	2.5	0.4	1.9	0.3
Southern Africa	0.1	0.6	0.1	0.6
Lebanon	5.6	0.6	4.5	0.5
Afghanistan	0.5	0.8	0.5	0.8
Iran	1.4	2.3	1.1	2.0
Iraq	0.3	0.7	0.3	0.6
Other Western Central Asia	4.3	2.4	4.1	2.0
China	4.0	7.3	4.4	7.7
Hong Kong	0.9	5.3	0.9	5.3
South Korea	0.4	1.7	0.5	1.7
Taiwan	0.4	0.7	0.5	0.8
Other East Asia	0.1	0.3	0.2	0.3
Philippines	1.8	5.1	3.2	6.7
Vietnam	3.6	3.1	3.7	3.1
Other South East Asia	2.3	1.2	2.3	1.3
India	2.4	10.2	2.2	9.3
Sri Lanka	1.6	4.2	1.4	3.7
Pakistan	1.3	3.8	1.1	3.2
Bangladesh	1.2	0.9	1.0	0.7
Other	0.1	0.4	0.1	0.3

Table 3: Comparative Indicators of the Labour Market Integration of Immigrants, Montreal and Toronto Metropolitan Areas, 2005

	Males				Females			
	Employment Rate Gap[a]	**|t|**	**Wage Gap[b]**	**|t|**	**Employment Rate Gap**	**|t|**	**Wage Gap**	**|t|**
Montreal	-0.072	25.2	-0.258	38.1	-0.111	40.9	-0.224	-29.4
Toronto	-0.017	8.48	-0.282	62.4	-0.053	27.5	-0.282	-62.4
Difference	-0.055	15.9	+0.024	2.95	-0.057	17.2	0.058	6.61

[a]Average full-time full-year employment rate of immigrant workers minus average full-time full-year employment rate of Canadian born workers.
[b]Average log of weekly wages of immigrant full-time full-year workers minus average log of weekly wages of Canadian born full-time full-year workers.

Table 4: Male Immigrant Employment Rate Gaps by Country of Origin (2006)

Montreal			Toronto		
Most Common Countries of Origin[a] (in descending order)	**Employment Rate Gap[b]**	**|t|**	**Most Common Countries of Origin[c] (in descending order)**	**Employment Rate Gap**	**|t|**
1. Haiti	-0.076	7.95	1. India	0.005	1.15
2. Italy	-0.014	1.45	2. China	-0.100	18.4
3. France	0.008	0.74	3. Hong Kong	-0.041	6.69
4. Lebanon	-0.071	6.60	4. Philippines	0.044	7.03
5. Morocco	-0.152	13.7	5. U.K.	0.079	13.1
6. Algeria	-0.182	14.7	6. Italy	0.025	3.70
7. China	-0.182	14.6	7. Sri Lanka	-0.031	4.52
8. Vietnam	-0.044	3.39	8. Jamaica	-0.015	2.13
9. Romania	-0.061	4.30	9. Pakistan	-0.090	12.2
10. Portugal	0.049	3.16	10. Portugal	0.018	2.38

[a]Represent 47.1 percent of all immigrants in Montreal.
[b]Average employment rate of immigrant workers minus average employment rate of Canadian born workers.
[c]Represent 52.9 percent of all immigrants in Toronto.

Table 5: Selection Grids for Skilled Workers (Maximum Number of Points)

	Circa 2003[a]		Fall 2009[b]	
	Canada	**Quebec**	**Canada**	**Quebec**
Schooling	25	11	25	28
Assured Employment	15	15	10	10
Work Experience	21	10	21	8
Adaptability[c]			10	6
Age	10	10	10	16
Knowledge of English (French) for Canada (Quebec)	16	18	16	16
Knowledge of French (English) for Canada (Quebec)	8	6	8	6
Spouse's Schooling	5	5		16
Family or Friends in Canada (Quebec)	5			8
Children				8
Financial Autonomy				1
Total	105	75	100	123
Pass	75	58	67	63

[a]Source: DeVoretz and Pivninko (2008).
[b]Source: Citizenship and Immigration Canada (2010) and Immigration et Communautés Culturelles Québec (2010).
[c]Includes points for Spouse's Schooling for Canada in 2009.

Table 6: Decomposition of Immigrant Employment Rate Gaps

	Montreal		Toronto		Montreal - Toronto	
	Employment Rate Gap	**|t|**	**Employment Rate Gap**	**|t|**	**Employment Rate Gap**	**|t|**
Males						
Observed gap[a]	-0.072	25.3	-0.017	8.48	-0.055	15.9
Explained gap	-0.001	0.19	0.046	7.34	-0.047	4.68
Education	0.006	8.17	0.001	2.20	0.005	5.30
Experience	0.006	2.23	0.014	5.55	-0.008	2.07
Language	-0.040	8.73	-0.018	4.93	-0.022	3.77
Majority language[b]	-0.022	8.33	-0.001	0.45	-0.021	5.31
Others[c]	0.026	13.1	0.049	33.4	-0.023	9.20
Unexplained gap	-0.146	13.6	-0.116	16.5	-0.030	2.35
Fixed effect	-0.077	3.68	-0.088	3.41	0.012	0.35
Education	-0.002	1.48	-0.005	4.93	0.003	1.76
Experience	-0.061	5.04	-0.059	7.58	-0.002	0.13
Language	-0.015	1.16	0.054	2.24	-0.069	2.52
Majority language	-0.023	2.05	0.053	2.27	-0.077	2.96
Others	0.009	1.54	-0.018	5.54	0.027	4.12
Immigrant specific effects	0.075	8.20	0.053	9.43	0.022	2.05
Countries of origin (total effect)	-0.025	4.34	-0.023	5.63	-0.002	0.32
Countries of origin (Muslim)[c]	-0.022	9.73	-0.013	16.6	-0.009	3.89
Composition	n.a.		n.a.		-0.010	3.16
Returns	n.a.		n.a.		0.001	0.26
Countries of origin (non-Muslim)	-0.003	0.80	-0.010	2.90	0.007	1.32
Composition	n.a.		n.a.		0.001	0.04
Returns	n.a.		n.a.		0.006	1.52
Source country of degree	0.002	1.43	0.003	4.76	-0.002	1.15
Years since immigration	0.083	10.3	0.054	12.5	0.029	3.26
Citizenship	0.016	8.25	0.020	17.0	-0.002	0.90
Females						
Observed gap	-0.111	40.9	-0.053	27.5	-0.057	17.2
Explained gap	-0.050	7.35	-0.016	2.71	-0.034	3.87
Education	-0.005	5.35	-0.008	13.3	0.003	2.80
Experience	0.012	3.74	0.013	5.02	-0.001	0.34
Language	-0.048	9.97	-0.025	5.67	-0.023	3.62
Majority language	-0.014	1.30	-0.012	0.61	-0.002	0.08
Others	-0.009	5.04	0.004	2.48	-0.013	5.37
Unexplained gap	-0.144	14.3	-0.138	19.1	-0.006	0.47
Fixed effect	-0.039	2.11	-0.005	0.20	-0.035	1.16
Education	-0.001	0.29	-0.004	3.71	0.004	2.02
Experience	-0.085	8.26	-0.076	10.2	-0.010	0.78
Language	-0.004	0.38	-0.017	0.84	0.013	0.54
Majority language	-0.014	1.30	-0.012	0.61	0.002	0.08
Others	-0.014	3.61	-0.036	12.1	0.022	4.51
Immigrant specific effects	0.083	9.81	0.100	18.6	-0.017	1.73
Countries of origin (total effect)	-0.021	3.87	-0.007	1.68	-0.014	2.09
Countries of origin (Muslim)[d]	-0.019	10.5	-0.012	18.9	-0.007	3.59
Composition	n.a.		n.a.		-0.005	1.85
Returns	n.a.		n.a.		-0.002	0.52
Countries of origin (non-Muslim)	-0.002	0.45	0.005	1.49	-0.007	1.13
Composition	n.a.		n.a.		-0.007	1.16
Returns	n.a.		n.a.		-0.000	0.07
Source country of degree	0.007	4.68	0.005	6.71	0.002	1.05
Years since immigration	0.083	11.2	0.088	22.0	-0.005	0.64
Citizenship	0.014	8.13	0.014	13.3	0.000	0.14

[a] Difference between the employment rate of immigrant and that of Canadian born workers.
[b] An individual is considered to speak the language of the majority in Montreal (Toronto) if he/she knows French (English) and speaks French (English) at home.
[c] The category *Others* include *Family related* and *Availability of other sources of income* variables.
[d] Muslim countries include Algeria, Egypt, Morocco, Other Northern Africa, Afghanistan, Iran, Iraq, Other Western Central Asia, Pakistan and Bangladesh.

APPENDIX B

Table B1a: Linear Probability Regression Model Coefficients—Common Regressors[a]

	Males								Females							
	Montreal				Toronto				Montreal				Toronto			
	Can. Born		Immigrants		Can. Born		Immigrants		Can. Born		Immigrants		Can. Born		Immigrants	
	Coef.	|t|	Coef.	|t|	Coef.	|t|	Coef.	|t|	Coef.	|t|	Coef.	|t|	Coef.	|t|	Coef.	|t|
Constant	0.191	17.87	0.158	7.67	0.249	52.19	0.183	15.16	0.149	16.78	0.049	2.52	0.237	47.76	0.077	6.86
(Potential) Experience[b]	0.032	54.33	0.022	23.88	0.036	53.70	0.028	52.90	0.037	84.07	0.025	29.82	0.04	80.51	0.031	62.83
(Potential) Experience^2/100	-0.075	63.62	-0.049	27.28	-0.077	76.56	-0.060	57.61	-0.087	95.75	-0.060	33.98	-0.09	84.10	-0.069	68.70
Education (Reference category: H.S. certificate)																
No certificate	-0.087	20.55	-0.027	3.15	-0.088	20.06	-0.039	8.33	-0.139	33.81	-0.051	6.95	-0.097	19.31	-0.065	15.4
College/Trade certificate	0.015	4.68	0.036	4.70	0.053	15.31	0.067	16.24	0.027	8.35	0.055	7.64	0.051	13.89	0.064	16.28
Univ. diploma/certificate	0.037	6.17	0.052	4.73	0.045	6.96	0.073	12.55	0.078	14.38	0.090	8.73	0.053	7.92	0.082	15.15
Bachelor's degree	0.070	17.46	0.071	8.43	0.081	22.91	0.101	22.82	0.084	21.70	0.099	12.09	0.079	21.27	0.115	26.76
Masters or Ph.D	0.053	8.93	0.088	9.18	0.071	13.38	0.108	19.65	0.075	12.07	0.119	11.45	0.101	16.77	0.137	23.05
Knowledge of official languages (Reference category: English only)																
French only	0.073	8.37	-0.004	0.39	0.07	1.03	-0.189	3.56	0.047	5.49	0.004	0.52	-0.085	1.46	-0.091	2.48
English and French	0.097	11.66	0.059	7.35	-0.011	2.63	-0.011	1.83	0.088	10.78	0.074	10.11	-0.011	2.93	0.004	0.78
None	-0.118	2.29	-0.096	5.28	-0.146	3.37	-0.101	12.23	-0.043	0.78	-0.045	3.98	-0.134	2.64	-0.088	16.01
Languages spoken at home[b] (Reference category: English)																
French	0.018	5.06	-0.005	0.55	0.019	1.21	0.019	0.85	0.047	12.54	-0.004	0.41	0.016	1.09	0.029	1.37
Other	-0.030	3.22	-0.040	5.19	-0.027	3.81	-0.032	9.74	-0.017	1.82	-0.036	4.64	-0.036	4.91	-0.049	14.9
Family related variables (reference categories: not married and no children)																
% Married	0.151	43.06	0.124	18.03	0.143	39.5	0.117	27.83	0.035	11.73	0.034	6.06	0.025	7.25	0.017	5.23
% Children age < 2	0.030	5.12	-0.017	1.66	0.048	8.74	0.028	4.64	-0.320	56.11	-0.232	26.64	-0.361	60.64	-0.272	51.73
% Children age 2 to 15	0.048	12.62	0.012	1.69	0.035	9.12	0.010	2.39	-0.096	25.75	-0.089	13.23	-0.170	42.05	-0.098	25.82
% Children age 15+	0.100	20.32	0.067	8.02	0.067	13.38	0.031	7.29	0.030	6.67	0.031	4.16	-0.031	6.16	0.004	0.97
Attend school	-0.188	47.97	-0.192	28.31	-0.209	53.54	-0.152	35.79	-0.170	46.8	-0.148	23.64	-0.190	48.23	-0.122	32.17
Other income/100	-0.039	4.22	-0.037	5.05	-0.008	6.71	-0.005	1.74	-0.041	12.59	-0.024	5.79	-0.016	9.38	-0.009	4.52

[a] The independent variable is a dichotomous variable that take the value of 1 if the individual is employed full-time full-year and 0 otherwise.

[b] Potential experience is defined as (Age – 18).

[b] See data description in Appendix A.

Table B1b: Linear Probability Regression Model Coefficients—Immigrant Specific Variables

	Males				Females			
	Montreal		Toronto		Montreal		Toronto	
	Coefficient	|t|	Coefficient	|t|	Coefficient	|t|	Coefficient	|t|
Countries of origin (Reference category: United States)								
Central America	0.004	0.22	0.000	0.02	-0.008	0.41	0.034	2.26
Haiti	-0.021	1.13	-0.160	2.74	0.034	1.90	-0.036	0.64
Jamaica	-0.073	2.05	-0.039	3.18	0.058	1.95	0.049	4.32
Trinidad	0.006	0.16	-0.028	2.01	0.055	1.75	0.027	2.13
Other Caribbean	0.017	0.66	-0.012	0.77	0.018	0.81	0.046	3.39
Guyana	0.020	0.46	-0.002	0.18	0.057	1.37	0.066	5.57
Other South-America	-0.007	0.35	0.001	0.06	0.021	1.13	0.024	1.93
France	0.014	0.72	0.043	1.64	0.074	3.84	0.037	1.31
Germany	-0.026	0.85	0.006	0.36	0.005	0.17	0.000	0.02
Other Western Europe	0.018	0.71	0.028	1.51	0.028	1.11	0.014	0.75
Romania	-0.021	1.01	0.032	2.07	0.041	2.02	0.120	7.81
Poland	-0.012	0.46	0.011	0.86	0.019	0.81	0.047	3.85
Ukraine	-0.054	1.47	-0.026	1.61	0.008	0.25	0.024	1.54
Russia	0.019	0.68	-0.002	0.12	-0.074	2.98	0.013	0.93
Hungary	-0.008	0.19	-0.036	1.57	-0.004	0.11	-0.032	1.55
Other Eastern Europe	-0.083	3.13	-0.015	0.98	-0.011	0.44	0.015	0.97
U.K.	0.052	2.14	0.027	2.34	0.005	0.22	0.039	3.48
Other Northern Europe	-0.050	0.87	-0.010	0.46	0.107	2.02	0.028	1.37
Greece	0.003	0.15	-0.023	1.44	-0.006	0.26	-0.001	0.05
Italy	-0.020	1.01	0.006	0.46	0.019	1.00	0.004	0.33
Portugal	0.044	2.00	0.004	0.31	0.038	1.78	0.044	3.62
Other Southern Europe	-0.044	1.68	-0.022	1.67	-0.016	0.64	0.034	2.74
West Africa	-0.028	1.10	-0.062	3.90	0.036	1.40	0.014	0.88
East Africa	-0.007	0.30	-0.050	3.83	0.007	0.28	-0.023	1.89
Algeria	-0.141	6.85	-0.138	2.22	-0.026	1.31	0.043	0.62
Egypt	-0.004	0.19	-0.103	5.55	-0.007	0.30	-0.053	2.70
Morocco	-0.111	5.68	-0.040	1.10	-0.036	1.87	-0.059	1.58
Other Northern Africa	-0.081	3.62	-0.119	5.25	-0.036	1.66	-0.057	2.53
Southern Africa	-0.057	0.63	0.042	2.35	0.158	1.84	0.024	1.25
Lebanon	-0.060	3.12	-0.061	3.09	-0.084	4.43	-0.045	2.26
Afghanistan	-0.075	1.97	-0.156	8.62	-0.006	0.18	-0.097	6.27
Iran	-0.101	3.91	-0.124	9.19	-0.074	2.90	-0.057	4.42
Iraq	-0.158	3.76	-0.113	5.84	-0.203	5.43	-0.038	2.11
Other Western Central Asia	-0.055	2.80	-0.093	7.14	-0.077	4.06	-0.054	4.30
China	-0.098	4.77	-0.098	8.39	0.003	0.18	0.014	1.28
Hong Kong	-0.019	0.64	-0.053	4.53	-0.017	0.59	0.018	1.62
South Korea	-0.064	1.66	-0.128	8.93	-0.028	0.75	-0.086	6.56
Taiwan	-0.133	3.52	-0.172	9.56	-0.068	1.85	-0.098	5.81
Other East Asia	-0.056	0.82	-0.063	2.36	-0.086	1.77	-0.020	0.90
Philippines	0.064	2.62	0.019	1.63	0.139	6.59	0.132	11.97
Vietnam	-0.050	2.40	-0.011	0.84	-0.012	0.61	0.076	6.04
Other South East Asia	-0.026	1.13	-0.036	2.32	-0.015	0.71	0.063	4.18
India	0.024	1.05	-0.016	1.40	0.012	0.56	0.032	2.99
Sri Lanka	-0.109	4.29	-0.021	1.73	-0.049	2.07	-0.016	1.39
Pakistan	-0.132	5.14	-0.101	8.07	-0.126	5.48	-0.146	12.73
Bangladesh	-0.171	6.14	-0.143	8.07	-0.085	3.51	-0.084	4.99
Others	-0.052	0.77	0.004	0.16	0.006	0.09	0.054	2.33
Foreign degree	-0.010	1.43	-0.019	4.78	-0.032	4.7	-0.026	6.74
Years since immigration	0.008	9.91	0.005	12.24	0.008	10.89	0.009	20.95
Years since immigration^2/100	-0.012	7.76	-0.009	9.85	-0.013	8.75	-0.014	16.25
Canadian Citizen	0.059	8.37	0.066	17.23	0.052	8.26	0.047	13.41