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# Immigrant Category of Admission and the Earnings of Adults and Children: How far does the Apple Fall?\*

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## Abstract

Immigrants in many Western countries have experienced poor economic outcomes. This has led to a lack of integration of child immigrants (the 1.5 generation) and the second generation in some countries. However, in Canada, child immigrants and the second generation have on average integrated very well economically. We examine the importance of Canada's admission classes to determine if there is an earnings benefit of the selection under the Economic Classes to: 1) the Adult Arrival immigrants and 2) the Child Arrival immigrants (1.5 generation) once old enough to enter the labour market. We employ unique administrative data on landing records matched with subsequent income tax records that also allows for the linking of the records of Adult Arrival parents and their Child Arrival children. We find, relative to the Family Class, the Adult Arrivals in the Skilled Worker category have earnings that are 29% higher for men and 38% higher for women. These differences persist even after controlling for detailed personal characteristics such as education and language fluency at 21% for men and 27% for women. Child Arrival immigrants landing in the Skilled Worker Class have earnings advantages (as adults) over their Family Class counterparts of 17% for men and 21% for women. These Child Arrival Skilled Worker advantages remain at 9% for men and 14% for women after controlling for child characteristics, the Principal Applicant parent's characteristics and the parent's subsequent income in Canada.

*JEL classification:* J15, J13, J31, J61, J62

*Keywords:* Canada, Immigration, Earnings, 1.5 generation, Second generation, Child immigrants, Integration, Points System, Skilled Workers, Economic Class.

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# 1 Introduction

In Canada and the United States, the economic outcomes of immigrants have generally deteriorated over the past 40 years, while in many European countries, which have only recently begun to receive immigrants, immigrants have also had poor economic outcomes. While the lack of integration of adult immigrants is cause for concern on its own and has been the focus of most of the research in this area, an important question is whether the children of immigrants (those born abroad and in the receiving country) are succeeding in the labour market. The relatively poor economic performance of immigrants and their children in several western European countries highlights the importance of finding optimal immigrant selection and integration policies. While economic outcomes of the children of immigrants have been better on average in the traditional immigrant receiving countries (e.g. the United States, Canada and Australia), this past success need not translate into future success given the changing source country composition of more recent immigrants and the increased competition for skilled immigrants from other OECD countries.

Although recent immigrants to Canada have had some difficulty fully realizing their potential suggested by their high levels of pre-immigration human capital, their children have integrated well, and in many cases have surpassed the outcomes of the third or higher generation. The economic success of the children of immigrants to Canada may provide guidance to other countries who are struggling with social and economic integration. A key historical feature of Canadian immigration is the large share of immigrants selected based on economic criteria through which the Principal Applicant (PA) is assessed via a human capital specific points system.

While Canada was the first country to implement an immigration points system in 1967, several other countries have adopted their own points systems including Australia (1989), New Zealand (1991) and the UK (2002). Although the United States does not currently have a points system, they have recently explored the idea.<sup>1</sup> There exists evidence that

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<sup>1</sup>For example, there was a Senate Hearing in 2006 on the merits of a points system and a points system was also part of the Border Security, Economic Opportunity, and Immigration Modernization Act of 2013.

immigrants entering under the points system have superior outcomes in Canada (see [Beach et al. \(2011\)](#)). However, it is still unclear what role the criteria used to select economic immigrants has, through changing the composition of the Adult Arrivals, on the economic outcomes of the children of immigrants once they enter the labour market.

To answer this question, we use an administrative database that contains landing records of all immigrants arriving in Canada since 1980. For immigrants who came to Canada as children (the 1.5 generation), we are able to identify the entry class of their immigrant parents. In addition, we are able to follow the labour market outcomes of these Child Arrival immigrants through their subsequent income tax filings. This allows us to determine whether immigrant admission category provides supplementary information in terms of the outcomes of the children, in addition to providing strong information about the success of the Principal Applicant. This is an important issue for immigration policy since it could identify one mechanism to not only improve the outcomes of the first generation but to also potentially improve the economic integration of the next generation.

Adult arrival immigrants with greater human capital and earnings in the receiving country could help facilitate their children's transition to labour market success in a number of ways. First, more educated parents may directly teach their children adding human capital that might not otherwise be accumulated. Second, parents with higher income may invest in tutoring and/or private schools leading to higher human capital for their children. Third, higher income parents will typically have improved professional networks that could benefit their adult children. Finally, parents with higher education and income will typically have high unobserved ability which may, at least in part, be passed on genetically to their children. While we are not able to separately identify the importance of these different ways in which parental education and income can impact upon their children's success, we are able to test for associations between these variables in our unique data on immigrants.

We first examine the earning outcomes of Adult Arrivals. In addition to providing more

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The current US Administration has shown interest in shifting immigrant selection more towards skill-based criteria possibly using a points system mechanism.

recent data and estimates for relatively new admission classes, this also enables us to establish the Adult Arrival earnings differentials with the same data we use for the Child Arrival outcomes. We find superior outcomes for Skilled Worker PAs relative to other established classes (e.g. Family Class). We obtain similar results when we restrict the data to parents (Adult Arrivals with a Child Arrival). Importantly, we discover that the superior outcomes of parents entering as Skilled Workers extends to the children in terms of higher earnings. Compared to children for which one parent entered as a Skilled Worker, annual earnings are 15% lower for children whose parents applied as Refugees (or under the Humanitarian Class) for males and 16% for females. For children whose parents entered under the Family Class, annual earnings are 17% lower for males and 21% for females. These earnings advantages of Skilled Worker Child Arrivals relative to Family Class Child Arrivals remain once we control for mother tongue and country of birth. In addition, a small earnings advantage persists even after controlling for the education at landing and income in Canada of the parent who was the PA.

In the next section, we discuss the relevant literature while in Section 3, we discuss the methodology and data. In Section 4, we begin by showing the outcomes of immigrants who arrived as adults to establish difference in outcomes based on entry class and then present the empirical results for the Child Arrival immigrants. Finally, in Section 5, we discuss the policy implications and conclude.

## **2 Literature on the Economics of Immigrant Integration**

While many of the studies in the literature on the economics of immigration have focused on the labour market performance of immigrants who arrived as adults (see, for examples, [Baker and Benjamin \(1994\)](#), [Aydemir and Skuterud \(2005\)](#) and [Green and Worswick \(2012\)](#), for Canada), there has been much less research carried out on the labour market performance

of the children of immigrants.<sup>2</sup> Although the dividing line between an adult immigrant and a child immigrant is somewhat arbitrary, normally studies consider immigrants who arrived as children as being under the age of 18 upon arrival in the new country and this group is often referred to as the 1.5 generation since they are not the first generation (immigrants who were adults at arrival) nor are they the second generation (the native-born children of immigrants). In our analysis, while we cannot examine educational outcomes, we are able to measure earnings and some other labour market outcomes from the taxfiles that are linked to the landing records.<sup>3</sup>

## 2.1 Labour Market Outcomes of the 1.5 and Second Generation

While educational outcomes of the children of immigrants are relevant to immigration policy, their earnings outcomes are an important measure of their labour market success. [Skuterud \(2010\)](#) finds that relative earnings are increasing across subsequent generations of minority male immigrants. However, the same pattern is not found for white male immigrants. He concludes that this differential is consistent with social and cultural differences rather than discrimination.<sup>4</sup> [Schaafsma and Sweetman \(2001\)](#) studying the first and 1.5 generations reach a similar conclusion. [Nielsen et al. \(2003\)](#) analyze second-generation immigrants in Denmark and find that they receive lower wages in their first job compared to third or higher generation Danes of the same age. Also considering the case of immigrants in Europe, [Algan et al. \(2010\)](#) find that the second generation in France, Germany and the United Kingdom have better educational attainment than the first generation immigrants but evidence of

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<sup>2</sup>See [Borjas \(1994\)](#) and [Card et al. \(2000\)](#) (US); and [Sweetman and Dicks \(1999\)](#) for example of studies examining the intergenerational integration of different groups of immigrants.

<sup>3</sup>There is a large literature examining differences in educational outcomes. Using Canadian data, [Worwick \(2004\)](#) shows that while the children of immigrant parents have low performance on vocabulary tests at ages four to six by age 14, this disadvantage has been eliminated. Conversely, [Dustmann et al. \(2012\)](#) report that immigrant children in most European countries have lower average PISA test scores than do the native born in their countries. See [Sweetman and van Ours \(2015\)](#) for a very good review of the international evidence on the academic performance of the children of immigrants. For related analysis, also see [Corak \(2012\)](#) (Canada); [Chiswick and DebBurman \(2004\)](#) and [Gonzalez \(2003\)](#) (US); [Aydemir and Sweetman \(2008\)](#) (Canada and US); [Böhlmark \(2008\)](#) (Sweden); and [Bratsberg et al. \(2011\)](#) (Norway).

<sup>4</sup>Research on the intergenerational transmission of education has recently considered the role of culture and ethnic identity. For example, see [Schüller \(2015\)](#) for Germany.

similar cross-generational improvement in earnings are not found. Using Australian data, [Messinis \(2009\)](#) finds that the second generation has lower earnings than the third and higher generation but that no gap remains after controlling for language.

[Aydemir et al. \(2009\)](#) consider earnings mobility of immigrants. They find that in Canada earnings mobility of immigrants is similar to that of the native born. Also, intergenerational mobility of immigrants is higher in Canada than is the case in the United States.<sup>5</sup>

## 2.2 Immigrant Selection Policy and Labour Market Outcomes of the 1.5 and Second Generation

The existence of cross-country variation in selection regimes naturally raises the question of whether changing the selection system has impacts on the labour market outcomes of the children of immigrants. [Sweetman and van Ours \(2015\)](#) in their review of this field note that despite this indication of the potential benefits for the children of immigrants from the movement toward more skilled immigration, relatively little research has explored the linkages between outcomes of different immigrant generations to the underlying immigrant admission classes. They suggest that one would expect different outcomes of the 1.5 and second generation in different countries given the different selection policies employed. Australia and Canada have focused on relatively high skilled immigrants relative to, for example, Germany. In the US, the focus has been on family reunification as opposed to economic selection and this likely had implications for the labour market outcomes of the children of immigrants.

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<sup>5</sup>[Aydemir et al. \(2009\)](#) also consider educational mobility. See also [Gang and Zimmermann \(2000\)](#) who consider these relationships for immigrants to Germany. Their parents' education does not emerge as a powerful predictor of the educational outcomes of the adult children. See also the studies by [Riphahn \(2003\)](#) for Germany, [Cobb-Clark and Nguyen \(2012\)](#) for Australia, [Belzil and Poinas \(2010\)](#) for France and [Tsay \(2006\)](#) for Taiwan.

## 2.3 Our Contribution

As described above, one of the gaps in the literature on the economic outcomes of the children of immigrants relates to the role of the immigrant selection category of the parents. We are able to fill this gap for the 1.5 generation since the Canadian administrative data employed contains both Child Arrival immigrants as well as the immigrant admission category of the PA which in our case would be one of the child's parents. In addition to having the admission category of the child's parent, we are able to match the child's immigration record to the record of the parent who was the PA and in many cases to the future income tax records of the parent.<sup>6</sup> This allows us to introduce controls for the parent's education, language ability at the time of arrival in Canada and subsequent income in Canada. Having this information in our model means that we can determine whether any advantage experienced by the children of Skilled Worker immigrants, over say Family Class immigrants, is driven solely by the higher education and language fluency of the parent as opposed to some additional advantage generated through the points system selection criteria.

## 3 Data and Methodology

Our analysis is based on the Immigration Master Data Base (IMDB) housed at Statistics Canada in Ottawa.<sup>7</sup> The IMDB data is an exact census of the population of immigrants who landed in Canada between 1980 and 2014 and linked to their income tax records beginning in 1982.<sup>8</sup> It is increasingly used in Canadian research (see, for example, [Green and Worswick \(2012\)](#)) because it is perceived to be highly representative of immigrants in Canada engaged in income generating activities.

We next show the number of new Adult Arrivals by landing year to give a clearer sense of how large each admission category is and the changes overtime in the size of each category.

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<sup>6</sup>We are unable to reliably match records for the Refugee Class or the Live-in-Caregiver category. We elaborate on this in Section 3.

<sup>7</sup>This data will soon be available across Canada in the Research Data Centres.

<sup>8</sup>An immigrant had to have at least one tax record between 1982 and 2014 to be in the analysis.



We split the graphical presentation into two figures to ease the visual presentation. In Figure 1, we show the yearly counts for the larger and more established admission categories: Skilled Worker PAs, Family Class, Skilled Worker Spouses and Dependents (SD), and Refugees. Looking first at the male counts, which are on the left-hand-side of both figures, we can see a large increase in terms of Skilled Worker PAs starting in the early 1990s and then a decline shortly after 2000. The Skilled Worker SDs numbers are generally smaller but tracked upwards over most of the period. Family Class peaked in the early 1990s but the overall trend over the 1980 through 2014 period has been upward. Refugee numbers were high in the early 1990s and around 2006 but stayed reasonably stable in other years. For women, the Skilled Worker PA numbers are much smaller than for men and trend upward over the period dropping somewhat around 2013. The Skilled Worker SD numbers tend to mirror those of the Skilled Worker PAs for males which is not surprising given that these women would accompany their male partners who had been granted landed immigrant status under the point system. Family Class numbers for women are larger than those of their male counterparts, but follow a similar pattern across time. The female refugee numbers are similar to the male numbers with more female refugees admitted in the early 1990s than male refugees.

In Figure 2, we present the equivalent counts for the smaller and more recent admission categories. The Business Class combines immigrants selected because of a commitment on the PAs part to start a business and/or make a significant investment in a productive enterprise in Canada. It has been in existence since before the start of our data and among the PAs, it is primarily comprised of males. It reached a peak both in terms of PAs and SDs in the early 1990s.

The Live-in-Caregiver (LIC) program is a long-standing program in which primarily female PAs enter Canada providing domestic services in households and are given the right to landed immigrant status after 24 months of work. The number of LIC female PAs has varied considerably reaching peaks in the early 1990s and in the final years of our sample. The addition and growth of new programs for choosing Economic immigrants mirrors the

decline in Skilled Workers discussed in Figure 1. First, the Provincial Nominee (PN) agreements between the federal government and particular provinces allowed for the provinces to influence the total number and criteria for selection of immigrants intending to land there. British Columbia, Manitoba and Saskatchewan signed the first PN agreements in 1998 followed the next year by New Brunswick and Newfoundland and Labrador. Other provinces and territories followed (e.g. Ontario in 2008). There are currently PN agreements for all of the provinces and territories. The Provincial Nominee Program (PNP) numbers (both PA and SDs) have grown dramatically since 2000 as shown in Figure 2. As well, the Canadian Experience Class was introduced in 2008 to facilitate the acceptance of applicants who had previous experience in Canada as either temporary foreign workers or as international students. As seen in Figure 2, the numbers were small but grew rapidly over the period covered by our data with over 8,000 males admitted under the CEC in 2014.

We carry out estimation primarily on two sub-samples: 1) Adult Arrival immigrants who received landed immigrant status between the ages of 25 and 59, and 2) Child Arrival immigrants who received landed immigrant status prior to age 18. For the Adult Arrival estimation, the years of arrival used are 1980 to 2013 while we use the full years of available taxfile data (1982 to 2014). For the latter group, the Child Arrival immigrants, the admission category information is based on their parent's admission record where the parent was the Principal Applicant (PA).<sup>9</sup>

We are not able to reliably match the child to the PAs record for immigrants who entered under the Refugee Class or the Live-in-Caregiver (LIC) category, and so drop around a quarter of the sample for this reason for much of the analysis. We restrict the minimum age in the taxfile for our Child Arrival analysis to 24 to try and remove the period in which educational decisions affect contemporary labour market attachment. Given the years covered by the landing records and taxfiles, the oldest Child Arrival immigrants in our taxfile data are aged 52. As well, given that the Child Arrival immigrants were at most 17 years

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<sup>9</sup>Based on the landing records, less than 0.3% of the sample age 0 to 17 at arrival were Principal Applicants. We drop them from the analysis. A small number of Child Arrival immigrants are also dropped due to the Principal Applicant identification codes being missing or there being multiple Principal Applicants present.

old at landing, we only include Child Arrival immigrants who arrived between 1980 to 2004 in order to see the immigrants in the taxfiles. We further restrict the analysis in the taxfiles from 1987 to 2014 to allow for immigrants from the earliest arrival cohorts to be old enough to be observed in the taxfiles given the age restriction.

While the administrative landing records provide demographic information at the time of immigrating to Canada, it is not possible to obtain additional information on demographic characteristics that change once the immigration process is completed. Consequently, given that the Child Arrival immigrants of interest in this study arrived prior to the age of 18, we typically do not have useful information on final educational outcomes. We argue that the unconditional earnings outcomes are of fundamental interest for policy evaluation; consequently, the lack of educational controls does not seriously hamper this analysis. That said, we would also like to determine other aspects of integration such as educational and occupational outcomes, so data development that allows for this information to be collected on the 1.5 generation would benefit future research.

Our econometric analyses involve the estimation of human capital earnings regression models over our two main samples of interest: 1) Adult Arrival immigrants and 2) Child Arrival immigrants. The general econometric specification that we employ for the Adult Arrival regressions is:

$$\begin{aligned}
 Y_{it} = & X'_{it}\beta + \theta_1\text{Family}_i + \theta_2\text{Skilled Worker\_SD}_i + \theta_3\text{Business\_PA}_i + \theta_4\text{Business\_SD}_i \\
 & + \theta_5\text{PNP\_PA}_i + \theta_6\text{PNP\_SD}_i + \theta_7\text{LIC\_PA}_i + \theta_8\text{LIC\_SD}_i + \theta_9\text{CEC\_PA}_i \\
 & + \theta_{10}\text{CEC\_SD}_i + \theta_{11}\text{Refugee}_i + \theta_{12}\text{Other}_i + \epsilon_{it}.
 \end{aligned} \tag{1}$$

Our dependent variable in Equation 1,  $Y_{it}$ , is the natural logarithm of annual employment earnings as listed in the taxfiles.<sup>10</sup> Our main analysis is based on people with positive earnings in the taxfiles and therefore this analysis is based on an unbalanced panel. To test for the sensitivity of using an unbalanced panel and the particular earnings definition we also perform the analysis using several different outcome variables and samples. First, we estimate models in which we code people who filed taxes but had zero earnings as having

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<sup>10</sup>The variable is derived from the sum of *total earnings* from T4 slips and *Other employment income*.

earned \$1 before taking the natural log. Second, we estimate models with total income including self-employment earnings. Third, we estimate linear probability models where the outcome binary variable is whether or not the person has positive earnings. Fourth, we estimate linear probability models on whether an individual immigrant has emigrated from Canada. Fifth, we estimate the models using a ‘more’ balanced panel in which we restrict our sample to those who had filed at least 10 years of consecutive tax returns.

We discuss these other variables in Section 4 when we present the estimates. The vector  $X_{it}$  includes a constant, age and age squared, seven provincial/territory indicator variables for the region in which that year’s taxes were filed<sup>11</sup>, deviations from the provincial unemployment rate<sup>12</sup>, six cohort dummies (1985-89, 1990-94, 1995-99, 2000-04, 2005-09, 2010-14 with 1980-84 as the default category), years-since-migration and its quadratic term, an indicator for living in Canada prior to immigrating<sup>13</sup>, and a variable for the number of years in Canada prior to immigrating. In other specifications, we also add three highest level of education at arrival indicators (high school or less as the default category, post-secondary below a Bachelor’s degree, a Bachelor’s degree, and graduate degree)<sup>14</sup>, three knowledge of an official language indicators (English as the default category, French, no knowledge of an official language, and Bilingual indicating that the person speaks both English and French), two mother tongue indicators (English, French while ‘other’ mother tongue is the default category), four region of birth indicators (Western countries as default, Middle East and Africa, Asia, Central and South America, and Other) and 20 country of birth indicators.<sup>15</sup> The remaining right-hand-side controls in Equation 1 are the immigrant admission category

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<sup>11</sup>Atlantic region, Quebec, Manitoba, Saskatchewan, Alberta, B.C., territories, with Ontario as the omitted group.

<sup>12</sup>We include deviations from the unemployment rate instead of year dummies since the inclusion of year dummies could cause collinearity issues given that we include age, years-since-migration, and arrival cohort controls. Separately for each province, we calculate deviations from the provincial trend using Cansim Table 282-0087.

<sup>13</sup>For the adult analysis, the definition is based on the first year for tax returns in the matched data, while the PA definition is based on the first tax year variable in the landing file.

<sup>14</sup>It is worth noting that past research has found that foreign degrees have heterogeneous returns depending on source country. See for example [Li and Sweetman \(2014\)](#).

<sup>15</sup>Country dummies are determined based on the 20 countries of birth with the greatest number of the child arrivals. These include: Cambodia, China, El Salvador, Guyana, Haiti, Hong Kong, India, Iran, Jamaica, South Korea, Laos, Lebanon, Philippines, Poland, Portugal, Sri Lanka, Taiwan, UK, US and Vietnam.

variables. The default category contains Skilled Worker PAs. The variables that appear identify the Family Class, the Skilled Worker Spouses and Dependents (SD), the Provincial Nominee Program (PNP) PAs, the PNP SDs, the Live-in-Caregiver (LIC) PAs, the LIC SDs, the Canadian Experience Class (CEC) PAs, the CEC SDs, Refugees, and all other immigrants.<sup>16</sup> Given the differences in labour market outcomes for males and females, we provide separate estimates based on gender. We estimate Equation 1 by OLS.

For the Child Arrivals analysis, we estimate the following equation:

$$Y_{it} = X'_{it}\beta + \theta_1\text{Family}_i + \theta_2\text{Refugee}_i + \theta_3\text{Business}_i + \theta_4\text{LIC}_i + \theta_5\text{Other}_i + \theta_6\text{PNP}_i + \zeta Z_i + \epsilon_{it}. \quad (2)$$

The dependent variable of Equation 2,  $Y_{it}$ , is again the natural logarithm of annual employment earnings as listed in the taxfiles. The vector  $X_{it}$  includes a constant, the child's age in the taxfile year and age squared, seven region or province indicator variables for the region in which that year's taxes were filed, and deviations from the unemployment rate described above. We begin by exploring the importance of the characteristics of the PA on the child's outcomes. The vector  $Z_i$  is a set of controls for the parent (Principal Applicant), and in our richest specification includes three indicators for the highest level of education at landing (high school or less is the default category, post-secondary below a Bachelor's degree, a Bachelor's degree, and graduate degree), three knowledge of an official language at arrival indicators (English is the default category, French, Bilingual, and no knowledge of an official language), PA age of immigration, gender of the PA, an indicator for living in Canada pre-immigration, years the PA lived in Canada pre-immigration, average income of the PA for the years when the child was 10 to 17<sup>17</sup>, an indicator for if there was no income for this calculation or if this information was not determinable, and two marital status in-

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<sup>16</sup>We do not separately identify PAs and SDs in the Family Class since the PA is determined by having a close family connection to someone who is already permanently in Canada and so we would not expect differences in economic outcomes for the immigrant to be related to this status as opposed to the person being a Family Class SD.

<sup>17</sup>We have used income for the years the child was 10 to 17 to proxy family resources available at the time when a student might be deciding on post-secondary education. The variable combines inflation adjusted self-employment income and earned income for principal applicant each year in which the child immigrant was 10 to 17 years old, then the average amount for all years with non-zero combined income is calculated.

dicators (Widowed/Separated, Single/Never Married with Married as the default category). In some specifications we also include additional characteristics of the Child Arrival. We include four cohort dummies (1985-89, 1990-94, 1995-99, 2000-04 with 1980-84 as the default category), years-since-migration and its quadratic term. Further, to determine how much of the differences in earnings are simply due to differences in source countries across immigrant admission categories, we also estimate specifications where we add controls for the child’s mother tongue (English, French while ‘other’ mother tongue is the default category), the child’s region of birth and additional country of birth indicators for the 20 top source countries.<sup>18</sup> We also control for taxfile year of first earnings to capture entry labour market conditions. We again provide separate estimates based on gender. The immigrant admission category controls are simpler than in the Adult Arrivals analysis since the Child Arrival is never the PA in our sample. We also estimate Equation 2 by OLS.

## 4 Empirical Results

Below, we present evidence on the role of immigrant admission category as a predictor of immigrant earnings. We first present results for Adult Arrival immigrants in order to see how large the differences in earnings are across immigrant admission categories for the first generation and to provide us a frame of reference for considering how large they might be for the 1.5 generation. Next, we carry out an equivalent analysis over the sample of Child Arrival immigrants.

### 4.1 Cross Admission Class Differences in Earnings of Adult Arrival Immigrants

As has been well established in previous research, immigrants who are admitted under the Skilled Worker program, in addition to arriving with higher levels of education, also have

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<sup>18</sup>The region of origin and country of birth dummies are the same as those listed in the description of Equation 1.

superior earnings outcomes in Canada compared to immigrants who were admitted under the other main admission categories such as the Family Class or Refugees.<sup>19</sup>

#### 4.1.1 Characteristics of the Adult Arrivals

In Table 1, we present sample means of key variables calculated over the Adult Arrival (those age 25 to 59 at time of arrival) sample separately for men and women.<sup>20</sup> For men, the largest admission category is PAs in the Skilled Worker category at 39% followed by the Family Class at 22% and the Refugee Class at 15%. For women, the Family Class is the largest group at 31% followed by the Skilled Worker SDs at 23%, the Skilled Worker PAs at 16% and the Refugees at 12%. It is important to note that within the Skilled Worker category, men are much more likely than women to be the PA. This distinction is important since it is the PA within the Skilled Worker category whose admission is assessed based on the points system. In other categories, such as Family Class or Refugees, which person in the migrating married couple applies as the PA is much less likely to be economically meaningful (at least for the purposes of this study) since it is unlikely to be correlated with human capital characteristics such as education. The remaining immigrant admission categories include the Business Class, the Provincial Nominee Program (PNP) Class, the Live-in-Caregiver (LIC) Class, and the Canadian Experience Class (CEC). It is clear that, over the period covered by our data, these admission groups represented fairly small parts of the inflow of immigrants to Canada. We do control for them in our regression analysis, but our focus is primarily on comparing the outcomes of the Skilled Worker Class with the Family Class since this represents the main trade off in immigrant selection in terms of choosing immigrants based on likelihood of succeeding in the labour market as opposed to family reunification.

The remaining variables in the table demonstrate the considerable variation in our sample of Adult Arrival immigrant men and women in terms of: knowledge at arrival of English, French, bilingual (both English and French) and allophone (neither English nor French);

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<sup>19</sup>See [Aydemir \(2011\)](#) and [Sweetman and Warman \(2013\)](#) for a discussion of the relevant literature.

<sup>20</sup>To conserve space, we omit the means for the default categories in Table 1, however these can easily be recovered by adding up the means of the categories presented.

whether English or French was a mother tongue; highest level of education at arrival; and region of country of birth. These variables are used in some of our earnings regressions as control variables. Employment rates are 72% for men and 62% for women. Probability of emigrating is 7% for men and 6% for women. We define emigration as someone who had not died and whose last tax year (from the landing records) was three years prior to the end of the sample period.<sup>21</sup>

#### 4.1.2 Multivariate Analyses of Adult Arrival Earnings Differences Across the Admission Classes

Next, we present results from the estimation of Equation 1 for the sample of Adult Arrival immigrants separately by gender. Table 2 contains the estimates for the Adult Arrivals sample of men. In column (1), a relatively parsimonious specification is estimated and contains detailed admission category variables as well as arrival cohort, years-since-migration<sup>22</sup> (YSM) controls, controls for living in Canada prior to attaining landed immigrant status, a linear/quadratic specification in age, controls for province or any territory of residence, and a detrended unemployment rate. The default category includes PAs under the Skilled Worker category, the actual immigrants who must pass the points test in order to be admitted. Relative to the PAs in the Skilled Worker category, earnings are -20% lower in the Skilled Worker Spouse and Dependents category (calculated as  $e^{-0.224} - 1$ ) and -46% lower for Spouses and Dependents in the Business Class. Family Class immigrants and those that entered as refugees have earnings disadvantages of 29% and 41%, respectively. However, the PAs in the Skilled Worker Class do not have the highest earnings of all of these categories as the PNP PAs (22%) and the CEC PAs (55%) both have higher earnings.<sup>23</sup> This suggests that while Skilled Workers are very successful relative to non-economic immigrants, the points

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<sup>21</sup>Over this period, the tax system in Canada refunds the federal value added tax to lower income individuals through quarterly payments, potentially worth over \$150 per quarter for a family of four. To qualify for these payments, one must file a tax return. This requirement, along with the ability to claim deductions and tax credits, results in an extremely high fraction of individuals filing taxes each year.

<sup>22</sup>This is in fact the number of years since attaining landed immigrant status in Canada.

<sup>23</sup>See [Pandey and Townsend \(2013\)](#) for a thorough analysis of the Provincial Nominee Programs.



system may not be the most effective way of selecting economic immigrants.<sup>24</sup>

In column (2), the same specification is estimated but with additional controls for the education of the Adult Arrival immigrant. As more variables are included that are correlated with the economic selection criteria used in the points system, the admission category coefficients on almost all of the categories (except the PNP and CEC PAs) generally move towards zero. This indicates that the advantage held by the Skilled Worker PAs is smaller once we control for education, mother tongue, language fluency at landing, and country of origin.<sup>25</sup> However, caution must be taken when interpreting the PNP and CEC coefficients, since, these are relatively new programs, so immigrants entering under them have only been in the Canadian labour market a few years. In addition, it may be that these differences in earnings across immigrant admission categories may vary according to how long the person has been in Canada. For example, it could be that PNP PAs transition quickly into the labour market because they often have pre-arranged employment while Skilled Worker PAs take longer to adjust in the absence of a pre-arranged job and must spend time finding a suitable job and possibly acquiring the language skills needed by employers. In order to explore these possibilities, we also estimated a version of the specification underlying column (4) but with a set of interactions of the admission category variables with the YSM variable.<sup>26</sup> Figure 3 contains log-earnings/YSM profiles by admission category separately for males and females. The Skilled Worker PAs and SD curves are in general highest for both men and women after the first 10 years in Canada. For lower values of YSM, the PNP PAs have higher log earnings but these curves are flatter which is consistent with the findings of [Pandey and Townsend \(2013\)](#) that PNPs have high short-term earnings, due to the fact they typically have pre-arranged employment, but tend not to have as high of earnings growth as the Skilled Worker PAs who likely have higher human capital than the PNP PAs at landing but may face challenges finding suitable jobs in Canada. We generally see faster log earnings

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<sup>24</sup>It is important to note that the earnings data come from tax records which do not contain information on hours of work so these earnings differences will in general be a combination of differences in hourly wage rates and differences in annual hours of work. We are not aware of any research on differences in hours of work across immigrant admission categories in Canada.

<sup>25</sup>The Canadian points system does not give points based on country of origin.

<sup>26</sup>These estimates are available upon request from the authors.

growth for the Skilled Worker immigrants than the other admissions categories.

Table 3 contains estimates from equivalent regressions run over the sample of Adult Arrival women. Although there are some clear differences compared with the results for Adult Arrival men, the general pattern of the immigrant admission category coefficients is similar. While the earnings gap of Skilled Worker PAs relative to Business Class immigrants, CEC PAs or CEC SDs is comparable, the disadvantage of Family Class immigrants, Skilled Worker SDs or PNP SDs is much larger for women.

Next, we explore the robustness of our findings to expanding the definition of the dependent variable to include both employment income and net self-employment income. In Table 4, we present estimates from models where the dependent variable is the log of this expanded measure of annual earnings. We include both the simplest and the richest specifications from the preceding tables (specifically column (1) and column (4) from Tables 2 and 3). Comparing the admission category controls of column (1) to those of column (1) of Table 2 indicates that the disadvantage experienced by the Family Class relative to the Skilled Worker PAs is smaller using the expanded measure of earnings. However, for the Skilled Worker SDs, Business PAs, Business SDs, CEC SDs and the Refugee category, their disadvantages relative to the Skilled Worker PAs grow once net self-employment income is included in earnings. Both PNP PAs and CEC PAs see their advantages relative to the Skilled Worker PAs grow in Table 4 relative to Table 2. The same patterns generally hold when we consider the richest specification of control variables in column (2) and compare the admission category coefficients to their counterparts in column (4) of Table 2. The results in columns (3) and (4) for females have similar patterns to those in the first two columns for men but are typically larger in absolute value. It is clear that female Skilled Worker PAs have large advantages relative to all of the admission categories with the exception of PNP PAs, CEC PAs and LIC PAs (although the last difference is only true in the simpler specification). The results suggest that net self-employment income is relatively more important for female PAs in the four economic categories (Skilled Worker, PNP, CEC and in the simpler specification the LIC) but not in the Business category. It is interesting that the same

cannot be said for SDs in these categories. Immigrant female PAs in these four economic categories may rely more on self-employment opportunities than do their male counterparts due to relatively weaker career opportunities possibly due to gender discrimination, or they could prefer more flexible schedules that may come with self-employment.

To this point our analysis has focussed on employed individuals with positive earnings from either wage employment or self-employment. However, it may be the case that there are important differences in employment rates across the immigrant admission categories that are masked by our analysis focussing on employed individuals. In Table 5, we present estimates from a linear probability model (LPM) where the dependent variable is an indicator for employment status. The right-hand-side control variables are designed in the same way as in Table 4 with columns (1) and (3) containing the simplest set of control variables for men and women, respectively, and columns (2) and (4) containing the richest specification. From (1), we see that Family Class immigrants are slightly more likely to work than the default Skilled Worker PA group; however, Skilled Worker SDs are 4 percentage points less likely to be employed and immigrants in the Business Class (either PAs or SDs) are over 25 percentage points less likely to be employed. PNP PAs are 4 percentage points more likely to work which is consistent with the findings of [Pandey and Townsend \(2013\)](#) that this group has a high labour force attachment in their early years in Canada due to the fact they often have pre-arranged employment. Similarly, LIC PAs and LIC SDs have higher employment rates than Skilled Worker PAs. The CEC PAs also have higher employment rates. Finally, the Refugees are 9 percentage points less likely to be employed than Skilled Worker PAs which is not surprising since the Refugees typically face greater obstacles at finding employment due to their experiences in their home countries and their lack of being selected on economic criteria. Comparing these findings to those of column (2), we see that the expanded set of controls does not generally change the pattern of results with the exception of the two LIC groups where the employment advantages (relative to the Skilled Worker PAs) found in column (1) are absorbed into the coefficients of the control variables. Considering the estimates in column (3) for women, a similar pattern is found to that of column (1) with a

larger employment advantage of Skilled Worker PAs relative to Family Class, Business SDs, PNP SDs, CEC SDs, and Refugees. Also, the employment advantage that men in the LIC SD group experience relative to the male Skilled Worker PAs is much smaller for the case of women in these admission categories. Taken together, it suggests that female Skilled Worker PAs have a strong employment attachment while immigrant women in these other categories may choose (or be expected) to spend more time out of employment perhaps caring for children or elderly family members and the same is less likely to be expected of immigrant men in the equivalent admission categories. Comparing these findings to those of column (4) where the richest specification is employed, we see that the main difference is that the LIC estimates are smaller in absolute value and closer to zero.

In order to combine information on the level of earnings and the different employment rates across the immigrant admission categories, we next estimate log earnings models where we allow for the possibility of the person having zero earnings from wage employment. A simple way to do this is to assign a level of earnings of \$1 to individuals who had zero earnings in the tax year and then use this variable defined across all individuals in the log earnings regressions. We present estimates from these log earnings models in Table 6 employing the same specifications as in Table 5, for men and women. Similar overall patterns emerge in column (1) for men, with the Family Class, Refugees, Business Class and the SDs of each of the Skilled Worker, Business, PNP and CEC classes all having lower log earnings than the default group of Skilled Worker PAs. Also, similar to what we found in our earlier analyses, the PAs in the PNP, LIC and CEC categories have higher earnings than the Skilled Worker PAs which is consistent with the idea that these economic categories have been successful at choosing immigrants who find work quickly after arrival in Canada. The Business PAs do not do as well as the Skilled Worker PAs in terms of earnings and this may be due to the fact that the high income these individuals have from other sources means that they do not feel the need to go to work for wages. Comparing these results to those of column (2), we generally see very similar patterns in the estimates with the exception again of the LIC PAs and LIC SDs who no longer have an earnings advantage and instead have a

small to moderate disadvantage relative to Skilled Worker PAs once we control for a broad set of personal characteristics. This is likely due to lower education and language fluency on the part of the LICs compared to the Skilled Worker PAs who are selected on these characteristics. Switching focus to columns (3) and (4) for immigrant women, we see similar patterns to the estimates but with larger absolute values which likely reflects the fact that non-employment is a more common outcome for immigrant women than for immigrant men. Once we account for it in our earnings measure, more pronounced differences across the immigrant admission categories emerge for women relative to men.

A natural question to ask is whether there is a higher probability of leaving Canada for certain immigrant admission categories. If so, and if the probability of emigrating (whether back to the home country or to some other country) is correlated with the earnings performance of immigrants in Canada, then these differential emigration probabilities could lead to biases in the estimated differences in earnings outcomes across the admission categories. [Aydemir and Robinson \(2008\)](#) investigated the importance of emigration for Canadian immigrants with an earlier version of our data and found that emigration is more common among younger male immigrants in the Skilled Worker category than for other immigrants. [Picot and Piraino \(2013\)](#), also using an earlier version of our data, found that lower earning immigrants are more likely to emigrate suggesting that not accounting for emigration could lead to an upward bias in estimates of earning growth of immigrants.

In order to explore this possibility, we estimated a linear probability model (LPM) of emigration defined off of the event of a person who did not make a taxfiling in the last three years of the tax data (2012-2014) and had not died.<sup>27</sup> The estimates from this analysis are presented in Table 7 following the same structure as used in Tables 5 and 6 with the first and third columns generated in an analysis using the relatively simple set of control variables and those in the second and fourth columns coming from a model with the relatively rich specification of control variables. For immigrant men, the Skilled Worker PA default group

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<sup>27</sup>Retired workers would still show up in these tax records since they would be required to file taxes. Given that the last year of filing tax information is merged to the landing records, we are able to estimate whether an individual emigrated even if they aged out of the sample for the earnings regressions.

are more likely to emigrate than are immigrants in each of the other admission categories with the exception of the Business PAs and SDs who may have significant business interests in their home countries which make them more likely to return than other immigrants. When the full set of control variables is included, the results are very similar but in general the effects are closer to zero and in some cases not significantly different from zero (e.g. the LIC PAs). Considering column (3) for women, again the results are very similar to what was found in column (1) for men. In column (4), when the richest set of controls are included, we see similar results with some evidence of smaller negative effects on emigration for PNP immigrants and the LIC groups relative to the Skilled Worker PAs.

In Table 8 we examine the earnings for adult arrivals with at least 10 consecutive tax returns to examine the sensitivity of the estimates of Table 2 and Table 3 to selection bias due to non-random emigration of immigrants from Canada.<sup>28</sup> If the decision to emigrate is correlated with the earnings performance that the immigrant has had in Canada, then ignoring the sample attrition due to emigration could bias our estimated parameters. In columns (1) and (2) of Table 8, we present estimates from models equivalent to those of columns (1) and (4) from Table 2 but with the 10-year consecutive tax return restriction. Considering first the model with the simpler set of control variables, we see coefficient estimates that are qualitatively very similar across the two tables. Note that we could not include the CEC variables due to the fact that the program was recently introduced, and consequently, we did not have immigrants entering under the CEC who had been in Canada for 10 consecutive tax years. Comparing the estimates from the richer specification in column (4) of Table 2 to column (2) of Table 8 we again see generally very similar coefficient estimates. The exceptions would be the two Business Class coefficients which are closer to zero but still negative and large in absolute value. Performing the equivalent comparison for women (columns (1) and (4) of Table 3 to columns (3) and (4) of Table 8) again suggests only small differences in the estimated coefficients with the exception of the LIC SDs coefficient which is closer to zero (-.114 compared with -.205) once the 10-years of consecutive tax filing

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<sup>28</sup>We find similar estimates if we restrict the sample to Adult Arrivals with 10 or more years of tax returns. See Online Appendix Table A1.

sample restriction is imposed. Taken together, the evidence for men and women suggests that bias due to non-random emigration is not a major issue at least in terms of estimating differences in earnings across the main immigrant admission categories in Canada over our sample timeframe.

In Table 9, we investigate whether the findings of Tables 2 and 3 hold when the sample of Adult Arrival immigrants is restricted to those who are PAs and the parent of one of the individuals in our Child Arrivals sample. Our primary reason for carrying out this analysis is to ensure that we understand any differences in the labour market experiences of the parents of the Child Arrivals from the rest of the Adult Arrival sub-population before considering how labour market outcomes as adults of Child Arrivals vary across the immigrant admission categories of their parents. Columns (1) and (2) contain results for men while (3) and (4) contain results for women with the first and third columns being based on the simplest set of control variables and the third and fourth containing the richest set of control variables. Since we conditioned on PAs in making the match, we do not see either the Business SD or the PNP SD variables in the model. Comparing column (1) to the first column of Table 2, similar coefficients are evident on the admission category controls; however, the magnitudes (in absolute terms) of at least some of the differences are larger in the Parents sample than in Table 2. For example, the coefficient on the Family variable being -.453 compared to -.343 in column (1) of Table 2 which would indicate a 36 versus a 29 percent earnings gap. Comparing the results of column (2) of Table 9 to column (4) of Table 2, we see quite similar coefficients on the admission controls when the detailed set of control variables are used. For women, comparing columns (3) and (4) of Table 9 to their counterparts in columns (1) and (2) of Table 3, respectively, we once again have the same general patterns although there is some variation in the individual estimated coefficients (for example, see the PNP PA coefficients). Taken together, the results for our Parents sub-set of the Adult Arrivals are qualitatively similar to what was found in our full Adult Arrivals analysis as presented in Tables 2 and 3.<sup>29</sup>

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<sup>29</sup>In Online Appendix Table A2, we repeat the analysis of Table 9 but after incorporating net self-employment income into our measure of employment earnings (as we did in our analysis that led to the

## 4.2 Cross Admission Class Differences in Earnings of Child Arrival Immigrants

Next, we consider the key question of whether the earnings advantages experienced by Skilled Worker immigrants relative to Family Class immigrants and Refugees are also present in the earnings of their children once they reach adulthood and enter the labour market. To do this, we take advantage of the unique longitudinal data at our disposal which contains the landing records of individual immigrants who arrived in Canada at young ages and links those records at the individual level to the person's subsequent income tax records from which we can identify the person's earnings. In addition to being able to determine the admission class of the child, in many cases, we can also link each person's record to a parent's landing record and subsequent income tax records in Canada allowing us to control for: 1) parental characteristics at landing (e.g. education, mother tongue, official language ability and country of birth) as well as 2) the parent's subsequent earnings in Canada.

### 4.2.1 Characteristics of the Child Arrivals

As shown in Table 10, 41% of the male Child Arrivals had a PA who was admitted as a Skilled Worker, while another 21% came under the Family Class. Twenty percent entered under the Refugee Class and 13% came under the Business Class. The remaining Child Arrivals came with Principal Applicants who were admitted either under the LIC or the PNP categories. The equivalent proportions are similar for the female Child Arrivals.

In Table 11, we show the breakdown of admission category by gender and region of birth for our sample of Child Arrival immigrants. For men, 54% were born in Asia, 26% in Europe, the US, Australia, or New Zealand, 5% in the Middle East or Africa, and 15% in Central and South America or another country. The percentages for women are close to those for men. Relative to other admission categories, Skilled Worker Child Arrivals are much more likely to

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estimates in Table 4). The estimates are comparable with those in Table 4. We find similar coefficients for the admission category variables that are common to the two tables. See, for example, the Family coefficients in the models for men and women.



have been born in the Western group (European/US/Australia/New Zealand) of countries. A much higher percentage of Family Class Child Arrivals were born in the Central/South America/Other group, while Refugee percentages tended to be similar to the overall percentages in terms of region of birth. Overall, these cross-admission category differences may have important implications for the earnings estimates. For example, immigrants from the Western countries tend to have higher earnings in Canada than other immigrants (see for example [Aydemir and Skuterud \(2005\)](#)), so this may result in higher earnings for the children of Skilled Worker immigrants.

In Tables 12 and 13, we present summary statistics for our sub-sample of Child Arrival immigrants, separately by gender. In the top part of these tables, we present the characteristics of the parent who was the PA. While there are some important differences between the admission classes, the means for the given admission class are very similar for male and female Child Arrivals. Given that the Skilled Worker PA is selected based primarily on human capital criteria, as would be expected, they tend to have much higher levels of education and are more likely to have knowledge of English and/or French.<sup>30</sup>

In the lower part of each table, we present the average characteristics of the Child Arrivals. For both men and women, average age in the taxfiles is similar across the different parental admission categories with the adult Child Arrivals of Family Class immigrants being the highest (32 for men and 31 for women) being the oldest, and the PNP Child Arrivals being the youngest (at 26 for men and women).<sup>31</sup> Differences in terms of the number of years-since-migration across these admission categories also reinforce the idea that the PNP and LIC Child Arrivals are younger and have spent fewer years in Canada than those admitted under other admission categories.

Comparing the means of the indicator variable for age at arrival of 10 years or younger, the Skilled Worker and the Refugee groups in our data are the most likely to have arrived

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<sup>30</sup>It is quite possible the self-assessed knowledge of official language variable has important measurement error that is correlated with admission class. Unfortunately, we cannot directly assess this issue with the current data.

<sup>31</sup>The level of detail of the summary statistics is constrained by the Statistics Canada disclosure rules.

at this young age while the PNP and LIC groups are the least likely to have arrived in this age range. The fact that the Skilled Worker group (51% for men and women) are much more likely to have arrived at these ages relative to the Family group (38% for men 40% for women) is likely due in part to the fact that their parents needed to be relatively young in order to obtain sufficient age points to meet the points system threshold for admission. Consequently, it will be important to control for age in our analysis and also to consider the implications of the sample selection driven by the structure of the immigrant admission class as well as the period of time in which the category was introduced when interpreting our findings.

Having either English or French (the two official languages of Canada) as a mother tongue also varies considerably across the immigrant admission categories for the Child Arrivals. While 20% and 21% of the respondents fall into this category for the Skilled Worker and Family categories, respectively, for men, less than 10% fall into this category for many of the other admission categories. Given the importance of language skills as determinants of labour market outcomes, it is important to estimate differences in labour market outcomes across admission categories both with and without language controls so as to fully understand the role of a parent's immigrant selection process in determining the earnings outcomes of the immigrant's children.

#### **4.2.2 Multivariate Analyses of Child Arrival Earnings Differences Across the Admission Classes**

Table 14 presents the estimates of Equation 2 for Child Arrival immigrant males who arrived prior to age 18, while in Table 15 the corresponding estimates are presented for females. In column (1), we present the estimates for all the admission categories with basic controls which also include age and age squared, province or territory of residence, and a detrended unemployment rate. First, looking at the estimates for males in Table 14, Family Class Child Arrivals experience around a 17% earnings deficit (calculated as  $e^{-0.187} - 1$ ) versus the default admission category, the children of Skilled Workers, while children of Refugees and

Business Class immigrants have a 15% and 11% earnings deficit, respectively. In column (2), we present estimates from the equivalent model to column (1) but over the sub-sample of Child Arrival immigrants for which we can match them to the landing records for their Principal Applicant (PA) parent. As already noted, we are unable to accurately match the PAs of the Refugee and LIC Classes of immigrant admission to their children who arrived in Canada with them. Consequently, we exclude these two categories and present the estimates from the identical model from column (1) in column (2) for comparative purposes.<sup>32</sup>

For the remaining columns of the table, the estimation is based on this matched sample. As we move across the columns, the specification employed includes an increasingly larger number of controls in terms of the parent's personal characteristics (columns (3) and (4)) and the adult Child Arrival's characteristics (columns (5) and (6)) at the time of landing in Canada. In addition, column (6) contains a control for the first year in which the adult Child Arrival filed taxes in Canada as a way of controlling for labour market entry cohort. This process of adding an increasingly richer set of control variables allows us to investigate the extent to which the parental admission category effects of column (1) may be picking up the effects of other parental characteristics and child characteristics. In column (3), the base model of column (2) is estimated with controls for the parent's education level. Post-secondary education of the parent at landing is associated with higher earnings for the immigrant Child Arrival as an adult; however, the relationship is not monotonically increasing in years of post-secondary. This is a surprising result since based on our discussion in Section 1, greater education of the parent could raise their children's earnings through higher quality teaching of children by parents. The coefficients on the admission category variables suggest a small drop in the difference between the Skilled Worker Child Arrivals relative to: 1) the Family Class arrivals (-13% compared to -16%), 2) the Other category (-11% compared to -13%) and a smaller effect for the Business Class (-10% compared to -11%). Given that selection on the PA's education is most clearly defined for the Skilled

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<sup>32</sup>The CEC category of admissions is relevant for our Adult Arrival analysis but not for the Child Arrival analysis since Child Arrivals admitted under this program were not yet old enough (within our sample's time frame) to have labour market earnings and be in our Child Arrivals sample.

Worker Class (relative to all other classes), it is not surprising that the earnings of the Skilled Worker Child Arrivals tend to decline relative to each of the other classes once we control for education.

In column (4), the same model as in (3) is employed but with additional PA controls for knowledge of official languages, gender, age-at-immigration, marital status at arrival and average PA income when child was between the ages of 10 and 17. The Child Arrival's current earnings is increasing in the parent's income (measured in units of \$10,000).<sup>33</sup> This could reflect the fact that the Child Arrival is benefiting from the resources available within the family while the Child Arrival is in his/her teenage years suggesting perhaps more resources are available to support education than would otherwise be present if the PA had lower income in Canada. Another possibility is that the parental income variable is proxying for unobserved ability of the PA which may be passed on to the Child Arrival (either genetically or through a more supportive environment for learning and personal development) which could explain the positive correlation between Child Arrival earnings and PA income.

We see modest changes in the estimated coefficients on the admission category controls as we scan across the columns. The change is towards lower earnings for the Skilled Worker Child Arrivals group relative to each of the other admission classes of Child Arrivals. However, it is important to note that each of the coefficients on the admission category controls remain statistically significant with the same sign as in column (1). As was the case with the introduction of the education controls, this is consistent with the fact that the points system selection criteria are shaping the composition of the PAs admitted as Skilled Workers and this also shapes the composition of the Child Arrivals under this class. Once the factors that determine this selection (education and language fluency) are entered as separate controls in the earnings regression for the Child Arrivals, they explain these effects rather than having them fall into the admission control coefficients. In column (5), a richer set of controls is added which includes controls for the Child Arrival's years-since-migration, arrival cohort, and controls for time spent in Canada prior to landing as an immigrant. This leads to a

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<sup>33</sup>The match rate for this income variable is as high as 47% for Skilled Worker PAs, and as low as 22% for 'Other' PAs, see Tables 12 and 13.

substantial increase in the advantage that PNP Child Arrivals experience relative to the default Skilled Worker Child Arrivals from 12% in the analysis of column (4) to 22.5% in the analysis of column (5). However, we do not see large changes in the coefficients on the other admission category variables in column (5) when compared with column (4).

In column (6), we estimate the same model but with controls for the Child Arrival's mother tongue, a set of country/region of birth controls, and a set of income tax filing years. The admission category coefficients are largely unchanged relative to those of column (5) with the exception of the Business Class control which is closer to zero.

Next, in Table 15 we present the estimates from a set of identical analyses to those of Table 14 but estimated over the sample of female Child Arrival immigrants. The general patterns of the results for women are similar to those found for men. The earnings gap for Family Class immigrants is relatively larger for females (-21% compared to -17%) while the opposite is true for Business Class immigrants (-6% for women compared to -11% for men). As was the case for men, once we condition on the sample of Child Arrival women who can be matched to the landing records of their PA parents, the estimates in column (2) on the admission category variables are largely unchanged from their column (1) counterparts. Moving across the columns of Table 15, we see that adding more controls tends to reduce the absolute value of the coefficient on all of the admission class coefficients suggesting that controlling for factors related to the selection of immigrants admitted under the Skilled Worker points system tends to reduce the earnings advantage that their children who arrived with them experience. However, it is important to note that a significant advantage remains relative to the Family Class suggesting that the female Child Arrivals of a parent admitted under the Skilled Worker category has higher earnings in our richest specification of column (6), with Family Class Child Arrivals earning 14% less. This suggests that the points system selection is picking up on characteristics of the PAs that are associated with higher future earnings for their children who arrived in Canada as children beyond simply education and language differences. The effect of PA income when the Child Arrival was 10 to 17 is positive and similar in magnitude to the case for the analysis for male Child Arrivals.

It is worth highlighting that in the analysis for both male and female Child Arrivals that once we include a sufficiently rich set of control variables, the coefficients on the university controls for the parent indicate higher earnings for the Child Arrival than for the case of College (post-secondary below university in the Canadian case) education of the parent. It continues to be the case that the point estimates on the Graduate variable are smaller than on the Bachelor variable which does not seem to be consistent with human capital theory and our idea that more educated parents provide higher quality direct instruction to their children. This may reflect unobserved heterogeneity across the Child Arrivals that is not adequately captured by our set of controls variables.

Given the large differences between the gender of the parent PA found in Tables 12 and 13 by admission category, and in particular between Skilled Workers and Family Class immigrants, we explored the sensitivity of the results to the gender of the parent who applied as the PA for immigration by carrying out an analysis where we restricted the sample to Child Arrivals where the parent was a male PA. As can be seen in the Online Appendix Table A3, the coefficients on the admission category variables are largely unaffected by the exclusion of Child Arrivals with a female PA.

### 4.2.3 The Possible Role of Age-at-Arrival for Child Arrivals

As noted above, a large body of research suggests that age of immigration is very important in terms of the social and economic integration of immigrants. Much of the research suggests that immigrants who arrive as children have outcomes that are indistinguishable in many regards from the second generation. One potential mechanism for determining the relationship between adult earnings and child age-at-arrival is differences in language acquisition (see [Bleakley and Chin \(2004, 2008\)](#)). Research, such as [Schaafsma and Sweetman \(2001\)](#) indicates that immigrants who arrive in their middle teen years tend not to integrate well. However, we do not know how age-at-arrival and parental admission category inter-relate. For example, if younger children are better able to integrate than older children, then advantages in terms of the earnings performance of Child Arrivals whose parent was selected as

Skilled Workers, over other Child Arrival immigrants, may be less important for the children who arrived at younger ages. As seen in Tables 12 and 13, there are important differences in terms of the percentage of the various admission classes that arrived prior to age 11. While 51% of the male Child Arrival immigrants of Skilled Workers arrived prior to age 11, for the Family Class, only 38% did. Furthermore, for the male children of Live-in-Caregivers, only around 26% did.

To examine the importance of age at arrival in terms of the earnings as adults of Child Arrival immigrants, we estimate Equation 2 restricting the sample to those that arrived between the ages of 0 and 10 and then repeat the exercise for the Child Arrival immigrants who arrived between the ages of 11 and 17. These estimates are presented in Tables 16 and 17. We present four specifications for each age-at-arrival sub-group ranging from our simplest specification (in columns (1) and (5) and our richest specification in columns (4) and (8)). Comparing the results from the simplest specifications for males, the estimated coefficients on the admission category variables are generally quite similar between the 0 to 10 arrival age analysis and the 11 to 17 arrival age analysis. The main exception relates to the Business Class coefficient which is larger in absolute value for the younger age at arrivals (-0.151) than the older ones (-0.017). The opposite pattern is found for the Child Arrival males in the LIC category where, relative to the Skilled Worker Child Arrivals, the younger age-at-arrival sub-group has relatively higher earnings as adults than the older age-at-arrival sub-group. As we add a progressively richer set of controls, the differences in earnings across admission categories are smaller for both the 0 to 10 age-at-arrival analysis and the 11 to 17 age-at-arrival group. However, for both age-at-arrival sub-groups, important differences remain even in our richest specification suggesting that Skilled Worker Child Arrivals have higher earnings as adults than do the Family Class Child Arrivals. This indicates that the economic criteria used to select Skilled Workers under the Point System leads to Child Arrivals as adults with higher labour market earnings even after detailed controls for the parent and the child are included. We continue to see advantages for the PNP category which is as noted above a more recent economic category of admission than the Skilled

Worker Category.

In Table 17, equivalent estimates are presented from analyses over the 0 to 10 and 11 to 17 age-at-arrival sub-group for women. The findings are very similar across the two age-at-arrival sub-samples. However, larger differences are present in the estimated coefficients on the Family Class and Refugee variables for the 0 to 10 group (-.243 and -.246) relative to the 11 to 17 sub-group (-.183 and -.124) suggesting that a younger age-at-arrival is more advantageous for women in the Skilled Worker category relative to each of these admission categories relative to what was found for men.

Comparing all of these estimates across the two tables of Adult Arrival regressions to those found for Child Arrivals suggests that the selection effects for many of the economic categories are more pronounced among the Adult Arrivals relative to the Child Arrivals. However, the patterns are similar. Economic selection criteria, such as those used in the Skilled Worker points system, lead to a composition of incoming immigrants (both Adult Arrivals and Child Arrivals) who are expected to have higher earnings in Canada than are those selected under the non-economic admission classes, such as the Family Class. This implies a strong multi-generational aspect to the economic benefits experienced by immigrants resulting from the economic selection of immigrants.

#### 4.2.4 Sensitivity Analysis for the Child Arrivals

Next, we carry out several robustness checks similar to those carried out in the Adult Arrivals analysis already discussed. The goal is to see if the findings so far for Child Arrivals are robust to issues such as incorporating net self-employment earnings, non-employment and emigration.

In Table 18, we present earnings regression results analogous to those of Table 4 for the Adult Arrivals where the dependent variable is the log of the sum of earnings from wage employment and net earnings from self-employment. The coefficients on the Family Class variable are for the most part similar to their counterparts in Table 14 for men, but



for women (see Table 15), the estimates are further below zero once net self-employment is incorporated. If women perceive their economic opportunities to be limited in terms of traditional employment due to gender discrimination, then they may see self-employment as a way to achieve greater economic success while avoiding these barriers to career advancement. It also may be that female children of Skilled Workers have the confidence and family financial support that makes it easier for them (relative to their Family Class counterparts) to form their own companies and generate high net self-employment income.

The remaining admission category coefficients are quite different between Table 18 and Tables 14 and 15. For example, Business Class coefficients are negative and much further from zero for both men and women when self-employment earnings information is included than is the case for their counterparts when the dependent variable is defined only using earnings from wage employment. This is somewhat surprising since one might have expected the children of Business Class immigrants to be more entrepreneurial than the children of Skilled Workers. It may be the case that this is capturing a wealth effect where the Business Class families may be wealthier than the Skilled Worker families and the Child Arrivals may not feel the need to work or if they work they may be involved in companies based outside of Canada and their incomes may not be well reflected in their Canadian income tax records.

Also, worth noting is the large positive coefficients on the LIC coefficients for men and women in Table 18 compared with the negative coefficients in Tables 14 and 15. LIC Child Arrivals may learn of entrepreneurial opportunities through their parents' networks generated from their experiences as Live-in-Caregivers. This is a question that warrants further investigation in future research.

While the estimates are quite different between Table 18 and Tables 14 and 15, it is clear that the Skilled Worker Child Arrivals have either an equivalent (for the case of males) or even greater (for the case of females) advantage relative to their counterparts in the Family Class after we incorporate net self-employment earnings into the analysis.

Next, we consider whether there are important differences in employment rates across the groups of Child Arrival by admission category. In Table 19, we present LPM estimates

analogous to those of Table 5 in our Adult Arrivals analysis. Child Arrivals in the Family Class, Business Class, and in the Other category are less likely to be employed than Child Arrivals in the Skilled Worker Class and these differences are present in virtually all of the four specifications for men and women. The negative effects are largest for the Business Class. Child Arrivals in the PNP class also have lower employment rates than those in the Skilled Worker Class with the exception of males in the richest specification (fourth column) where the coefficient estimate is positive. Taken together, with the possible exception of the Business Class and female PNPs, these differences in employment rates are not large - certainly smaller than those found for Adult Arrivals. This suggests that the earnings differences across admission categories for Child Arrivals described thus far are unlikely to be seriously affected by possible selection bias due to differences in employment probabilities across the admission categories.

However, in order to shed light on this possibility, we estimate log earnings models where we incorporate the Child Arrivals observations with zero earnings. Table 20 contains earnings regression estimates that are equivalent to those in Tables 14 and 15, but where Child Arrivals with zero earnings from employment are included in the sample assigning earnings of \$1 to the person (so that the log of earnings is zero). Accounting for zero earnings in this way leads to larger negative coefficients on the Family Class variable for both males and females. A similar result is found for Refugees, Business Class and the Other category. This suggests that non-employment is more common for Child Arrivals whose parent entered in this category relative to those whose parent entered as a Skilled Worker. The one exception is the LIC group who were at a small earnings disadvantage relative to Child Arrivals in the Skilled Worker category in Tables 14 and 15 but have a large advantage in the simple specification of columns (1) and (5). This suggests that employment rates are especially high for LIC Child Arrivals.

Next, we consider the importance for our analysis of the likelihood that Child Arrivals emigrate from Canada. In Table 21, LPM estimates are presented for a model of emigration that is analogous to the one estimated for Adult Arrivals and presented in Table 7. The

estimates on the Family Class variable are typically either not statistically different from zero or negative and near zero. Larger effects are found for the Child Arrivals in the Business Class where a three to five percentage points higher probability of emigration is found (relative to Skilled Worker Child Arrivals). This is similar to what was found for Adult Arrivals in the Business Class category in Table 7. Child Arrivals in the LIC and PNP categories have lower probabilities of emigrating (except for PNP in column (4)) than do their Skilled Worker counterparts.

Our final robustness check relates to the Child Arrival analysis involves restricting the samples to Child Arrivals with at least 10 consecutive tax returns. Relative to our analysis in Tables 14 and 15, this restriction will tend to reduce the number of Child Arrivals in the sample who emigrate. These estimates are presented in Table 22.<sup>34</sup> The coefficient estimates for the analysis for men (in the common specifications across the tables) are largely unaffected by the sample restriction. With the exception of the LIC where the negative difference becomes larger in absolute value and the PNP where the positive difference becomes negative in all but the richest specification for men (column (4)). The overall patterns for women are similar. The key fact that we take away from this robustness check is that the Skilled Worker/Family Class Child Arrivals earnings difference is not qualitatively affected by restricting the sample to Child Arrivals who consistently file tax returns over a 10-year period.

Taken together, the evidence from these robustness checks suggests that variation in the estimated earnings differences across admission categories of Child Arrivals is reasonably robust to non-employment, self-employment and emigration. In particular, our key Child Arrivals finding of a Skilled Worker earnings advantage, relative to the Family Class, is found to be quite robust.

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<sup>34</sup>Broadly similar results are found in Table A4 when the restriction is in at least 10 (not necessarily consecutive) tax returns.

## 5 Conclusion

Governments of immigrant receiving countries are looking for policies that have the potential to improve the economic and social integration of immigrants. One method that has been found to be successful in terms of economic integration has been the selection of the Principal Applicant (PA) through a points system based on human capital proxy variables such as education. However, in order to fully appreciate the potential benefit of a skills-based economic selection system, it is essential to not only determine the economic integration of the parents, but also to understand what implications different selection categories have for the integration of the children. While there has been some analysis of the economic integration of adult immigrants based on class of admission, due to data limitations, very little is known about the potential value of such programs in terms of indirectly affecting the expected outcomes of the immigrant children.

In this paper, using a unique administrative Canadian data set, we were able to identify the class of admission of the PA of Child Arrival immigrants. Using this information, we directly determined whether there are differences in labour market outcomes of the children based on their parents' admission category. In addition, we linked at the individual level the records of Child Arrival immigrants to the landing documents of their Adult Arrival, PA parents. This novel data set allowed us to explore how cross admission category differences in the earnings of Child Arrivals vary both with and without controls for standard economic selection criteria such as education and language fluency. Finally, we were able to link the Child Arrival landing records and subsequent Canadian income tax records to the Canadian income tax records of their PA parents. This allowed us to control for the PA parent's average earnings in Canada when the Child Arrival was between the ages of 10 and 17 to see whether controlling for family resources in this way absorbed any differences in Child Arrival earnings (as adults) across immigrant admission categories of the parent.

We provide new evidence on the earnings performance of Adult Arrival immigrants based on their admission category and PA status. Immigrants admitted under the main economic

categories - Skilled Worker, Canadian Experience Class and Provincial Nominee Programs (PNP), and Live-in-Caregiver (LIC) - have higher earnings in Canada than those admitted under the Family Class or as Refugees. Business Class immigrants, while technically economic immigrants, typically have lower earnings than the other economic categories and this likely reflects the fact that they generate their income from other sources than wage employment such as investment income, and much of this income could be generated outside of Canada and not necessarily represented in their Canadian income tax filings. We find large earnings advantages for the PAs in the Skilled Worker, CEC and PNP admission categories relative to immigrants entering under the Family and Refugee Classes. These advantages remain even after controlling for key selection criteria such as education and English and French language fluency. This indicates that the criteria employed in these admission categories lead to the selection of immigrants likely to succeed in the Canadian labour market in more nuanced ways than merely choosing those with high education and good language skills in English or French.

The children of Skilled Worker immigrants have superior employment earnings than children whose parents entered under the other two main admission categories, the Family Class and Refugee Class, as well as through the Business Class. We rule out that these advantages are coming solely from differences in English/French language fluency or differences in terms of country of birth. In addition, these differences are diminished somewhat but remain after we control for the education, language fluency and earnings in Canada of the PA parent. While we are unable to identify the outcomes of the second generation, the outcomes of the 1.5 generation suggest a key benefit of a points system, as is in place in Australia, Canada, New Zealand, the UK and as currently being considered in the US.

In conclusion, our analysis suggests that selecting immigrants based on economic criteria in general and a points system (as in the Skilled Worker category) in particular, both improves the outcomes of the Principal Applicant, and also leads to higher earnings outcomes for the Child Arrival immigrants once they enter the labour market.

Implementing such a program and shifting immigration to select a large share of immi-

grants through a points system may not be feasible in some countries. Issues such as historic constraints and chain migration through family reunification may make a large scale Skilled Worker program, such as the one used in Canada, politically infeasible. As well, it is not possible for us to identify the impacts of expanding the scale of such a program in Canada; however, given the large size of Canada's current program, this suggests considerable room for latitude in other countries to introduce similar programs.

While human capital points systems are shown to be an effective way to select economic immigrants, they clearly are not the only effective form of economic selection. Our findings suggest that Adult Arrival immigrants in two recently created economic admission classes, the PNP and the CEC, have even higher earnings shortly after arrival in Canada indicating that improvements to the points system for the Skilled Worker Class may still be possible. However, further research is needed once these newer economic admission classes have become more established, and there has been enough time to fully assess their labour market outcomes, to determine the best criteria to use when selecting economic immigrants.

Compliance with ethical standards.

Conflict of interest: The authors declare that they have no conflict of interest.

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Figure 1: Established admission classes, Adult Arrivals



Figure 2: Smaller and more recent admission classes, Adult Arrivals

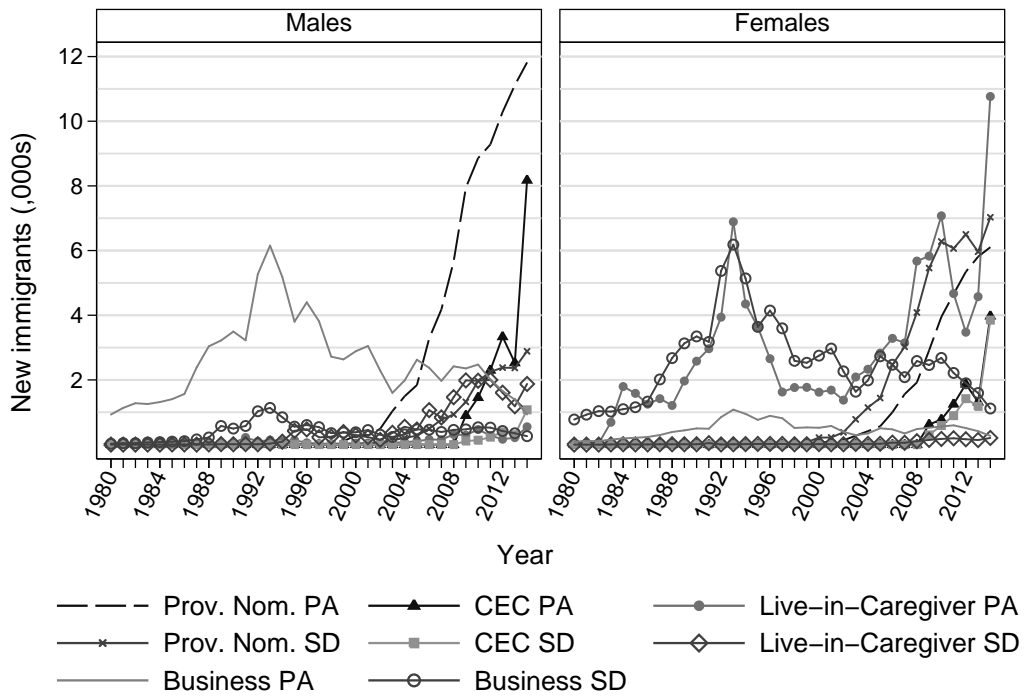
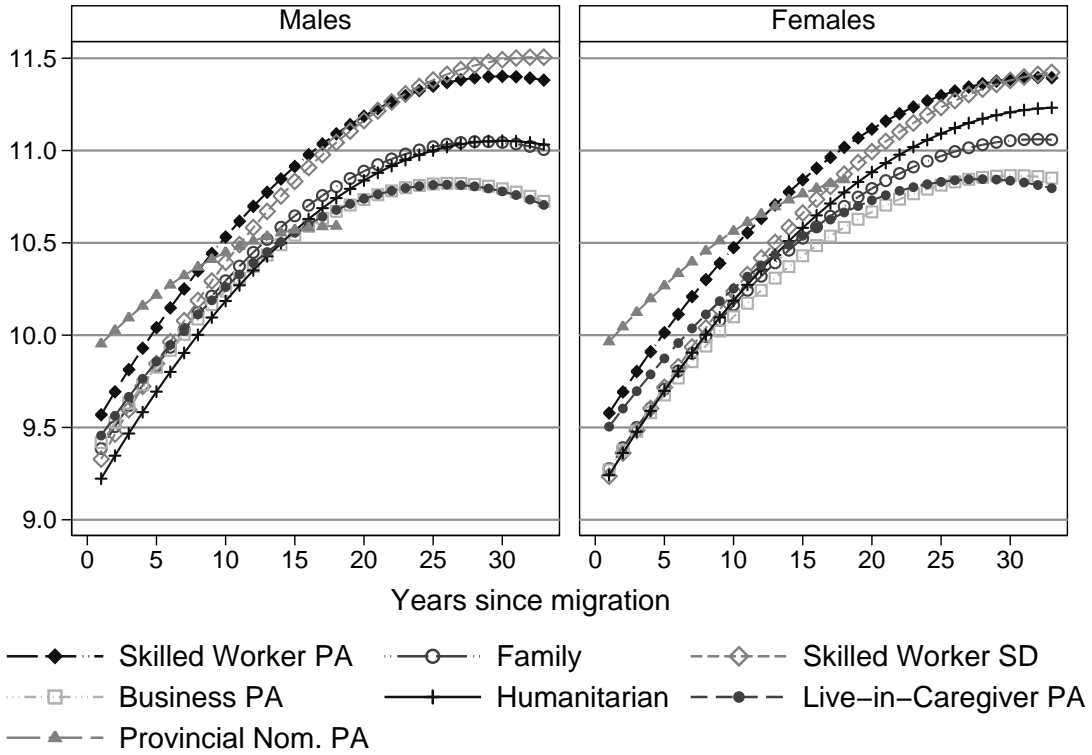


Figure 3: Years-since-migration-log-earnings by admission class, Adult Arrivals



Notes: Intercepts calculated for 35 years old, mother tongue not English or French but could speak English at the time of immigration, immigrated between 2000 and 2004, had a Bachelor's degree at the time of immigration, lives in Ontario, born in China and did not live in Canada prior to immigrating and an unemployment rate of 6%.

## 6 Figures and Tables

Table 1: Summary Statistics for Adult Arrivals

	Males		Females	
	Mean	Standard Deviation	Mean	Standard Deviation
<b>1. Person observations</b>				
<b>Admission Class</b> (Default Skilled Worker Principal Applicant)				
Family Class	0.22	0.42	0.31	0.46
Skilled Worker Spouse/Dependent	0.08	0.27	0.23	0.42
Business Principal Applicant	0.05	0.22	0.01	0.09
Business Spouse/Dependent	0.01	0.09	0.05	0.22
Prov Nom Principal Applicant	0.04	0.19	0.02	0.13
Prov Nom Spouse/Dependent	0.01	0.09	0.02	0.16
Live-in-Caregiver Principal Applicant	0.00	0.04	0.05	0.22
Live-in-Caregiver Spouse/Dependent	0.01	0.10	0.00	0.03
CEC Principl Applicant	0.01	0.08	0.00	0.06
CEC Spouse/Dependent	0.00	0.03	0.00	0.05
Refugee	0.15	0.36	0.12	0.32
Other	0.04	0.20	0.03	0.16
<b>Knowledge of Official Language</b> (Default English)				
French	0.05	0.22	0.05	0.22
Bilingual	0.10	0.30	0.08	0.27
Allophone	0.24	0.43	0.31	0.46
<b>Mother Tongue</b> (Default “Other”)				
English	0.12	0.33	0.12	0.32
French	0.03	0.18	0.03	0.16
<b>Education</b> (Default High school or less)				
College	0.25	0.43	0.24	0.43
Bachelor	0.31	0.46	0.29	0.45
Graduate Degree	0.14	0.35	0.09	0.29
<b>Region of Birth</b> (Default US/Europe)				
Middle East/Africa	0.11	0.32	0.09	0.28
Asia	0.55	0.50	0.59	0.49
Central/South America	0.11	0.31	0.11	0.31
Other	0.01	0.07	0.01	0.07
Emigration	0.12	0.33	0.10	0.29
Observations	1,731,710		1,774,330	
<b>2. Person-year observations</b>				
Employment (1,0)	0.72	0.45	0.62	0.48
Emigration	0.07	0.26	0.06	0.23
Observations	19,836,770		20,601,505	

Immigrants who arrived in Canada, 1980-2013. Person-year observations are from 1982-2014 taxfiles. All variables aside from Emigration and Employment are fixed on the landing record.

Table 2: Earnings regressions, Adult Arrival males

	(1)	(2)	(3)	(4)
<b>Admission/PA status interactions</b> (Default Skilled Worker PA)				
Family	-0.343** (0.0018)	-0.213** (0.0019)	-0.221** (0.0019)	-0.231** (0.0019)
Skilled Worker Spouse/Dependent	-0.224** (0.0027)	-0.175** (0.0027)	-0.164** (0.0026)	-0.175** (0.0026)
Business PA	-0.530** (0.0044)	-0.424** (0.0044)	-0.374** (0.0043)	-0.270** (0.0045)
Business Spouse/Dependent	-0.622** (0.0101)	-0.515** (0.0099)	-0.451** (0.0097)	-0.333** (0.0098)
PNP PA	0.198** (0.0042)	0.285** (0.0041)	0.320** (0.0040)	0.281** (0.0040)
PNP Spouse/Dependent	-0.126** (0.0075)	-0.0205** (0.0075)	0.0120 (0.0073)	-0.0195** (0.0071)
Live-in-Caregiver PA	-0.269** (0.0105)	-0.176** (0.0102)	-0.110** (0.0104)	-0.224** (0.0104)
Live-in-Caregiver Spouse/Dep.	-0.178** (0.0041)	-0.0411** (0.0043)	0.0185** (0.0043)	-0.123** (0.0046)
CEC PA	0.441** (0.0098)	0.459** (0.0097)	0.484** (0.0092)	0.511** (0.0089)
CEC Spouse/Dependent	-0.134** (0.0297)	-0.0863** (0.0296)	-0.0480 (0.0293)	0.0053 (0.0286)
Refugee	-0.535** (0.0021)	-0.395** (0.0022)	-0.287** (0.0022)	-0.348** (0.0024)
Other	-0.593** (0.0037)	-0.431** (0.0037)	-0.376** (0.0037)	-0.374** (0.0037)
<b>Arrival Cohort</b> (Default 1980-84 Cohort)				
1985-89	-0.0430** (0.0034)	-0.0439** (0.0032)	-0.0212** (0.0032)	0.0662** (0.0045)
1990-94	-0.211** (0.0032)	-0.222** (0.0030)	-0.172** (0.0030)	-0.101** (0.0043)
1995-99	-0.172** (0.0032)	-0.217** (0.0031)	-0.164** (0.0030)	-0.123** (0.0045)
2000-04	-0.155** (0.0031)	-0.228** (0.0030)	-0.162** (0.0030)	-0.264** (0.0045)
2005-09	-0.0975** (0.0032)	-0.172** (0.0032)	-0.132** (0.0031)	-0.252** (0.0047)
2010-14	-0.136** (0.0036)	-0.210** (0.0035)	-0.171** (0.0035)	-0.368** (0.0050)
Lived in Canada prior to Imm.	0.181** (0.0025)	0.165** (0.0024)	0.118** (0.0024)	0.125** (0.0024)
# of years in Canada prior to Imm.	0.0310** (0.0007)	0.0334** (0.0007)	0.0289** (0.0007)	0.0309** (0.0007)
<b>Highest level of education at arrival</b> (Default High school or less)				

Post-Secondary < Bachelor's		0.182**	0.154**	0.123**
		(0.0017)	(0.0017)	(0.0018)
Bachelor's Degree		0.321**	0.315**	0.302**
		(0.0019)	(0.0019)	(0.0020)
Graduate Degree		0.442**	0.419**	0.443**
		(0.0026)	(0.0026)	(0.0026)
<b>Knowledge of an official language</b> (Default English)				
French			-0.0937**	-0.122**
			(0.0037)	(0.0039)
Bilingual			0.0592**	-0.0004
			(0.0030)	(0.0031)
Neither			-0.105**	-0.110**
			(0.0017)	(0.0018)
<b>Mother tongue</b> (Default Other language)				
English			0.350**	0.264**
			(0.0021)	(0.0032)
French			0.247**	0.156**
			(0.0045)	(0.0046)
Years-Since-Migration (YSM)	0.117**	0.117**	0.117**	0.0987**
	(0.0002)	(0.0002)	(0.0002)	(0.0004)
YSM <sup>2</sup> /100	-0.292**	-0.295**	-0.295**	-0.223**
	(0.0011)	(0.0010)	(0.0010)	(0.0012)
<b>YSM-cohort interactions</b> (Default 1980-84 Cohort)				
YSM x 1985-89				-0.0055**
				(0.0003)
YSM x 1990-94				-0.0022**
				(0.0003)
YSM x 1995-99				0.0045**
				(0.0003)
YSM x 2000-04				0.0319**
				(0.0004)
YSM x 2005-09				0.0502**
				(0.0005)
YSM x 2010-14				0.150**
				(0.0012)
Region of Birth Controls	No	No	No	Yes
Detailed Country Controls	No	No	No	Yes
R-squared	0.134	0.148	0.162	0.181
Observations	14,373,440	14,373,440	14,373,440	14,373,440
Individuals	1,560,400	1,560,400	1,560,400	1,560,400

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is the natural logarithm of annual employment earnings. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Sample, adult male immigrants aged between 25-59 at arrival, who arrived between 1980 and 2013. Sample includes tax returns for the years when these individuals were between 25 and 60.

Table 3: Earnings regressions, Adult Arrival females

	(1)	(2)	(3)	(4)
<b>Admission/PA status interactions</b> (Default Skilled Worker PA)				
Family	-0.486** (0.0022)	-0.370** (0.0023)	-0.330** (0.0023)	-0.310** (0.0023)
Skilled Worker Spouse/Dependent	-0.361** (0.0023)	-0.312** (0.0023)	-0.278** (0.0023)	-0.253** (0.0023)
Business PA	-0.595** (0.0107)	-0.502** (0.0106)	-0.443** (0.0105)	-0.365** (0.0106)
Business Spouse/Dependent	-0.678** (0.0048)	-0.553** (0.0048)	-0.485** (0.0047)	-0.399** (0.0048)
PNP PA	0.275** (0.0064)	0.311** (0.0062)	0.345** (0.0061)	0.332** (0.0062)
PNP Spouse/Dependent	-0.296** (0.0056)	-0.160** (0.0056)	-0.117** (0.0055)	-0.131** (0.0055)
Live-in-Caregiver PA	-0.233** (0.0030)	-0.130** (0.0030)	-0.0957** (0.0030)	-0.203** (0.0034)
Live-in-Caregiver Spouse/Dep.	-0.228** (0.0205)	-0.141** (0.0199)	-0.0914** (0.0200)	-0.205** (0.0199)
CEC PA	0.482** (0.0119)	0.494** (0.0117)	0.541** (0.0115)	0.589** (0.0116)
CEC Spouse/Dependent	-0.136** (0.0199)	-0.0821** (0.0199)	-0.0559** (0.0197)	-0.0234 (0.0196)
Refugee	-0.556** (0.0027)	-0.415** (0.0027)	-0.303** (0.0028)	-0.294** (0.0030)
Other	-0.540** (0.0045)	-0.390** (0.0044)	-0.360** (0.0043)	-0.315** (0.0044)
<b>Arrival Cohort</b> (Default 1980-84 Cohort)				
1985-89	0.0581** (0.0037)	0.0442** (0.0035)	0.0592** (0.0035)	0.123** (0.0051)
1990-94	-0.0539** (0.0034)	-0.0839** (0.0033)	-0.0451** (0.0033)	-0.0369** (0.0050)
1995-99	-0.0295** (0.0035)	-0.105** (0.0034)	-0.0635** (0.0034)	-0.102** (0.0051)
2000-04	0.0098** (0.0035)	-0.114** (0.0034)	-0.0601** (0.0034)	-0.226** (0.0052)
2005-09	0.0244** (0.0036)	-0.118** (0.0035)	-0.0896** (0.0035)	-0.220** (0.0054)
2010-14	-0.0253** (0.0040)	-0.179** (0.0040)	-0.150** (0.0040)	-0.327** (0.0058)
Lived in Canada prior to Imm.	0.0593** (0.0026)	0.0490** (0.0025)	0.0168** (0.0025)	0.0249** (0.0025)
# of years in Canada prior to Imm.	0.0420** (0.0008)	0.0439** (0.0008)	0.0388** (0.0007)	0.0395** (0.0007)
<b>Highest level of education at arrival</b> (Default High school or less)				



Post-Secondary < Bachelor's		0.188**	0.164**	0.147**
		(0.0018)	(0.0018)	(0.0018)
Bachelor's Degree		0.369**	0.349**	0.329**
		(0.0020)	(0.0020)	(0.0021)
Graduate Degree		0.493**	0.448**	0.462**
		(0.0033)	(0.0033)	(0.0033)
<b>Knowledge of an official language</b> (Default English)				
French			-0.0681**	-0.0839**
			(0.0041)	(0.0044)
Bilingual			0.105**	0.0800**
			(0.0034)	(0.0036)
Neither			-0.146**	-0.156**
			(0.0018)	(0.0020)
<b>Mother tongue</b> (Default Other language)				
English			0.193**	0.228**
			(0.0023)	(0.0035)
French			0.225**	0.166**
			(0.0052)	(0.0053)
Years-Since-Migration (YSM)	0.111**	0.109**	0.109**	0.0904**
	(0.0003)	(0.0003)	(0.0003)	(0.0005)
YSM <sup>2</sup> /100	-0.255**	-0.256**	-0.257**	-0.189**
	(0.0011)	(0.0011)	(0.0011)	(0.0013)
<b>YSM-cohort interactions</b> (Default 1980-84 Cohort)				
YSM x 1985-89				-0.00478**
				(0.0003)
YSM x 1990-94				0.0004
				(0.0003)
YSM x 1995-99				0.0085**
				(0.0004)
YSM x 2000-04				0.0333**
				(0.0004)
YSM x 2005-09				0.0403**
				(0.0006)
YSM x 2010-14				0.101**
				(0.0014)
<hr/>				
Region of Birth Controls	No	No	No	Yes
Detailed Country Controls	No	No	No	Yes
<hr/>				
R-squared	0.118	0.134	0.142	0.153
Observations	12,857,005	12,857,005	12,857,005	12,857,005
Individuals	1,447,095	1,447,095	1,447,095	1,447,095

Notes: Robust standard errors clustered on individuals in parentheses, \*\* p<0.01, \* p<0.05, + p<0.10. The dependent variable is the natural logarithm of annual employment earnings. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Sample, adult female immigrants aged between 25-59 at arrival, who arrived between 1980 and 2013. Sample includes tax returns for the years when these individuals were between 25 and 60.

Table 4: Wage + self-employment earnings regressions, Adult Arrivals

	(1)	(2)	(3)	(4)
	Males		Females	
<b>Admission/PA status interactions</b> (Default Skilled Worker PA)				
Family	-0.185** (0.0061)	-0.322** (0.0067)	-1.630** (0.0086)	-1.160** (0.0091)
Skilled Worker Spouse/Dependent	-0.498** (0.0010)	-0.503** (0.0096)	-1.588** (0.0089)	-1.151** (0.0088)
Business PA	-2.560** (0.0140)	-1.823** (0.0142)	-3.004** (0.0322)	-1.853** (0.0317)
Business Spouse/Dependent	-2.900** (0.0352)	-1.925** (0.0344)	-3.558** (0.0153)	-2.308** (0.0157)
PNP PA	0.528** (0.0128)	0.402** (0.0123)	1.032** (0.0208)	0.925** (0.0201)
PNP Spouse/Dependent	-0.203** (0.0278)	-0.344** (0.0259)	-1.348** (0.0217)	-1.044** (0.0210)
Live-in-Caregiver PA	0.484** (0.0386)	-0.304** (0.0379)	0.542** (0.0120)	-0.228** (0.0137)
Live-in-Caregiver Spouse/Dep.	1.097** (0.0143)	0.131** (0.0158)	0.380** (0.0870)	-0.387** (0.0815)
CEC PA	0.977** (0.0232)	1.029** (0.0222)	1.815** (0.0346)	2.160** (0.0356)
CEC Spouse/Dependent	-0.651** (0.0991)	-0.461** (0.0974)	-1.413** (0.0655)	-1.182** (0.0644)
Refugee	-1.024** (0.0074)	-0.950** (0.0085)	-2.152** (0.0108)	-1.303** (0.0117)
Other	-1.036** (0.0129)	-0.891** (0.0132)	-1.950** (0.0186)	-1.274** (0.0186)
Cohort and YSM Controls	Yes	Yes	Yes	Yes
Lived in Canada Prior Controls	Yes	Yes	Yes	Yes
Highest Level of Education	No	Yes	No	Yes
Knowledge of an Official Language Controls	No	Yes	No	Yes
Mother Tongue Controls	No	Yes	No	Yes
YSM x Cohort interactions	No	Yes	No	Yes
Country/Region of Birth Controls	No	Yes	No	Yes
R-squared	0.083	0.117	0.100	0.146
Observations	19,686,020	19,686,020	20,459,735	20,459,735
Individuals	1,728,255	1,728,255	1,771,080	1,771,080

Notes: Robust standard errors clustered on individuals in parentheses, \*\* p<0.01, \* p<0.05, + p<0.10. The dependent variable is the natural logarithm of annual employment and net self-employment earnings. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Sample, adult male and female immigrants aged between 25-59 at arrival, who arrived between 1980 and 2013. Sample includes tax returns for the years when these individuals were between 25 and 60.

Table 5: Linear Probability Model of employment status, Adult Arrival

	(1)	(2)	(3)	(4)
	Males		Females	
<b>Admission/PA status interactions</b> (Default Skilled Worker PA)				
Family	0.0025** (0.0007)	-0.0283** (0.0008)	-0.137** (0.0009)	-0.104** (0.0009)
Skilled Worker Spouse/Dependent	-0.0416** (0.0011)	-0.0508** (0.0011)	-0.144** (0.0009)	-0.103** (0.0009)
Business PA	-0.301** (0.0015)	-0.240** (0.0016)	-0.331** (0.0032)	-0.225** (0.0032)
Business Spouse/Dependent	-0.276** (0.0036)	-0.206** (0.0036)	-0.368** (0.0015)	-0.251** (0.0016)
PNP PA	0.0411** (0.0015)	0.0254** (0.0015)	0.0992** (0.0021)	0.0827** (0.0021)
PNP Spouse/Dependent	0.0051+ (0.0031)	-0.0313** (0.0029)	-0.114** (0.0023)	-0.0872** (0.0022)
Live-in-Caregiver PA	0.114** (0.0046)	-0.0137** (0.0043)	0.0932** (0.0012)	-0.0100** (0.0014)
Live-in-Caregiver Spouse/Dep.	0.178** (0.0017)	0.0201** (0.0018)	0.0789** (0.0093)	-0.0228** (0.0086)
CEC PA	0.0795** (0.0025)	0.0837** (0.0025)	0.150** (0.0036)	0.189** (0.0037)
CEC Spouse/Dependent	-0.0462** (0.0105)	-0.0407** (0.0105)	-0.138** (0.0067)	-0.113** (0.0065)
Refugee	-0.0883** (0.0009)	-0.0899** (0.0010)	-0.183** (0.0011)	-0.113** (0.0012)
Other	-0.0662** (0.0015)	-0.0806** (0.0015)	-0.152** (0.0019)	-0.107** (0.0019)
Cohort and YSM Controls	Yes	Yes	Yes	Yes
Lived in Canada Prior Controls	Yes	Yes	Yes	Yes
Highest Level of Education	No	Yes	No	Yes
Knowledge of an Official Language Controls	No	Yes	No	Yes
Mother Tongue Controls	No	Yes	No	Yes
YSM x Cohort interactions	No	Yes	No	Yes
Country/Region of Birth Controls	No	Yes	No	Yes
R-squared	0.055	0.085	0.074	0.111
Observations	19,836,745	19,836,745	20,601,005	20,601,005
Individuals	1,731,710	1,731,710	1,774,275	1,774,275

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is an indicator for employment status (non-zero employment earnings). Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Sample, adult male and female immigrants aged between 25-59 at arrival, who arrived between 1980 and 2013. Sample includes tax returns for the years when these individuals were between 25 and 60.

Table 6: Earnings regressions incorporating zero earnings observations, Adult Arrivals

	(1)	(2)	(3)	(4)
	Males		Females	
<b>Admission/PA status interactions</b> (Default Skilled Worker PA)				
Family	-0.236** (0.0079)	-0.470** (0.0088)	-1.665** (0.0093)	-1.232** (0.0098)
Skilled Worker Spouse/Dependent	-0.589** (0.0121)	-0.645** (0.0118)	-1.652** (0.0097)	-1.183** (0.0096)
Business PA	-3.316** (0.0154)	-2.524** (0.0162)	-3.559** (0.0322)	-2.385** (0.0325)
Business Spouse/Dependent	-3.113** (0.0367)	-2.201** (0.0367)	-3.935** (0.0155)	-2.635** (0.0163)
PNP PA	0.587** (0.0166)	0.486** (0.0162)	1.166** (0.0230)	1.026** (0.0223)
PNP Spouse/Dependent	-0.0677* (0.0324)	-0.357** (0.0302)	-1.347** (0.0230)	-0.981** (0.0221)
Live-in-Caregiver PA	0.980** (0.0507)	-0.304** (0.0483)	0.791** (0.0135)	-0.223** (0.0153)
Live-in-Caregiver Spouse/Dep.	1.652** (0.0182)	0.0601** (0.0198)	0.589** (0.0986)	-0.417** (0.0912)
CEC PA	1.239** (0.0298)	1.318** (0.0293)	1.875** (0.0401)	2.308** (0.0412)
CEC Spouse/Dependent	-0.569** (0.113)	-0.426** (0.112)	-1.479** (0.0678)	-1.177** (0.0664)
Refugee	-1.286** (0.0093)	-1.154** (0.0109)	-2.140** (0.0116)	-1.292** (0.0127)
Other	-1.110** (0.0163)	-1.091** (0.0166)	-1.841** (0.0198)	-1.259** (0.0196)
Cohort and YSM Controls	Yes	Yes	Yes	Yes
Lived in Canada Prior Controls	Yes	Yes	Yes	Yes
Highest Level of Education	No	Yes	No	Yes
Knowledge of an Official Language Controls	No	Yes	No	Yes
Mother Tongue Controls	No	Yes	No	Yes
YSM x Cohort interactions	No	Yes	No	Yes
Country/Region of Birth Controls	No	Yes	No	Yes
R-squared	0.067	0.103	0.093	0.135
Observations	19,836,745	19,836,745	20,601,005	20,601,005
Individuals	1,731,710	1,731,710	1,774,275	1,774,275

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is the natural logarithm of annual employment earnings where we give people who filed taxes but had zero earnings \$1 before taking the natural log. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Sample, adult male and female immigrants aged between 25-59 at arrival, who arrived between 1980 and 2013. Sample includes tax returns for the years when these individuals were between 25 and 60.

Table 7: Linear Probability Model of emigration, Adult Arrivals

	(1)	(2)	(3)	(4)
	Males		Females	
<b>Admission/PA status interactions</b> (Default Skilled Worker PA)				
Family	-0.0376** (0.0005)	-0.0175** (0.0005)	-0.0292** (0.0005)	-0.0144** (0.0006)
Skilled Worker Spouse/Dependent	-0.0117** (0.0007)	-0.0060** (0.0007)	-0.00234** (0.0006)	0.00264** (0.0006)
Business PA	0.0675** (0.0013)	0.0670** (0.0013)	0.0667** (0.0028)	0.0556** (0.0028)
Business Spouse/Dependent	0.0713** (0.0032)	0.0621** (0.0033)	0.0538** (0.0012)	0.0531** (0.0013)
PNP PA	-0.0237** (0.0007)	-0.0015+ (0.0008)	-0.0238** (0.0009)	-0.0075** (0.0009)
PNP Spouse/Dependent	-0.0197** (0.0011)	0.0062** (0.0012)	-0.0253** (0.0008)	-0.0057** (0.0008)
Live-in-Caregiver PA	-0.0481** (0.0035)	-0.0034 (0.0036)	-0.0498** (0.0008)	-0.0115** (0.0009)
Live-in-Caregiver Spouse/Dep.	-0.0469** (0.0009)	0.0050** (0.0011)	-0.0393** (0.0047)	-0.0028 (0.0046)
CEC PA	-0.0282** (0.0008)	-0.0194** (0.0009)	-0.0213** (0.0010)	-0.0225** (0.0011)
CEC Spouse/Dependent	-0.0310** (0.0013)	-0.0236** (0.0017)	-0.0191** (0.0010)	-0.0127** (0.0011)
Refugee	-0.0431** (0.0005)	-0.0098** (0.0006)	-0.0432** (0.0006)	-0.0126** (0.0007)
Other	-0.0503** (0.0010)	-0.0223** (0.0010)	-0.0339** (0.0011)	-0.0142** (0.0011)
Cohort and YSM Controls	Yes	Yes	Yes	Yes
Lived in Canada Prior Controls	Yes	Yes	Yes	Yes
Highest Level of Education	No	Yes	No	Yes
Knowledge of an Official Language Controls	No	Yes	No	Yes
Mother Tongue Controls	No	Yes	No	Yes
YSM x Cohort interactions	No	Yes	No	Yes
Country/Region of Birth Controls	No	Yes	No	Yes
R-squared	0.059	0.072	0.051	0.066
Observations	19,836,745	19,836,745	20,601,005	20,601,005
Individuals	1,731,710	1,731,710	1,774,275	1,774,275

Notes: Robust standard errors clustered on individuals in parentheses, \*\* p<0.01, \* p<0.05, + p<0.10. The dependent variable is coded as one if the respondent did not file taxes between 2012 and 2014 and had not deceased and zero otherwise. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Sample, adult male and female immigrants aged between 25-59 at arrival, who arrived between 1980 and 2013. Sample includes tax returns for the years when these individuals were between 25 and 60.

Table 8: Earnings regressions, Adult Arrivals with at least 10 consecutive tax returns

	(1)	(2)	(3)	(4)
	Males		Females	
<b>Admission/PA status interactions (Default Skilled Worker PA)</b>				
Family	-0.337** (0.0023)	-0.216** (0.0024)	-0.492** (0.0027)	-0.308** (0.0028)
Skilled Worker Spouse/Dependent	-0.207** (0.0034)	-0.152** (0.0033)	-0.358** (0.0028)	-0.246** (0.0027)
Business PA	-0.585** (0.0056)	-0.318** (0.0057)	-0.632** (0.0135)	-0.388** (0.0132)
Business Spouse/Dependent	-0.630** (0.0133)	-0.331** (0.0127)	-0.697** (0.0057)	-0.403** (0.0057)
PNP PA	0.0823** (0.0115)	0.137** (0.0105)	0.225** (0.0209)	0.285** (0.0199)
PNP Spouse/Dependent	-0.179** (0.0267)	-0.0951** (0.0255)	-0.360** (0.0142)	-0.190** (0.0135)
Live-in-Caregiver PA	-0.267** (0.0158)	-0.174** (0.0154)	-0.234** (0.0038)	-0.187** (0.0041)
Live-in-Caregiver Spouse/Dependent	-0.185** (0.0069)	-0.0848** (0.0076)	-0.189** (0.0350)	-0.114** (0.0334)
CEC PA	N.A.	N.A.	N.A.	N.A.
CEC Spouse/Dependent	N.A.	N.A.	N.A.	N.A.
Refugee	-0.493** (0.0026)	-0.323** (0.0030)	-0.561** (0.0033)	-0.299** (0.0036)
Other	-0.532** (0.0046)	-0.317** (0.0045)	-0.525** (0.0052)	-0.291** (0.0051)
Cohort and YSM Controls	Yes	Yes	Yes	Yes
Lived in Canada Prior Controls	Yes	Yes	Yes	Yes
Highest Level of Education	No	Yes	No	Yes
Knowledge of an Official Language Controls	No	Yes	No	Yes
Mother Tongue Controls	No	Yes	No	Yes
YSM x Cohort interactions	No	Yes	No	Yes
Country/Region of Birth Controls	No	Yes	No	Yes
R-squared	0.132	0.182	0.112	0.152
Observations	9,682,190	9,682,190	9,378,520	9,378,520
Individuals	711,055	711,055	753,180	753,180

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is the natural logarithm of annual employment. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Sample, adult male and female immigrants aged between 25-59 at arrival, who arrived between 1980 and 2013. Sample includes tax returns for the years when these individuals were between 25 and 60. Sample restricted to those who had filed at least 10 years of consecutive tax returns.

Table 9: Earnings regressions, Parents

	(1)	(2)	(3)	(4)
	Males		Females	
<b>Admission/PA status interactions</b> (Default Skilled Worker PA)				
Family	-0.453** (0.0059)	-0.242** (0.0065)	-0.525** (0.0054)	-0.342** (0.0066)
Business PA	-0.590** (0.0059)	-0.315** (0.0062)	-0.710** (0.0154)	-0.367** (0.0162)
PNP PA	0.0463** (0.0178)	0.136** (0.0166)	0.0595 (0.0447)	0.125** (0.0418)
Live-in-Caregiver PA	-0.339** (0.0443)	-0.163** (0.0430)	-0.256** (0.0358)	-0.186** (0.0354)
Refugee	-0.508** (0.0044)	-0.322** (0.0054)	-0.647** (0.0074)	-0.346** (0.0085)
Other	-0.559** (0.0161)	-0.367** (0.0154)	-0.533** (0.0158)	-0.272** (0.0156)
Cohort and YSM Controls	Yes	Yes	Yes	Yes
Lived in Canada Prior Controls	Yes	Yes	Yes	Yes
Highest Level of Education	No	Yes	No	Yes
Knowledge of an Official Language Controls	No	Yes	No	Yes
Mother Tongue Controls	No	Yes	No	Yes
YSM x Cohort interactions	No	Yes	No	Yes
Country/Region of Birth Controls	No	Yes	No	Yes
R-squared	0.145	0.197	0.145	0.182
Observations	2,950,755	2,950,755	1,325,060	1,325,060
Individuals	252,495	252,495	109,790	109,790

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is the natural logarithm of annual employment. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Sample restricted to those who are PAs and the parent of one of the individuals in our Child Arrivals sample. Sample includes tax returns for the years when these individuals were between 25 and 60.

Table 10: Number of observations by Admission Class, Child Arrivals

	Males				Females			
	Pooled		Single Observation		Pooled		Single Observation	
Skilled Worker	993,365	36.3	132,915	40.9	935,395	35.9	120,385	40.8
Family	700,810	25.6	67,480	20.8	714,675	27.4	64,360	21.8
Refugee	572,260	20.9	65,225	20.1	521,850	20.0	58,100	19.7
Business	347,560	12.7	43,305	13.3	307,565	11.8	37,375	12.7
Live-in-Caregiver	10,610	0.4	1,795	0.6	10,740	0.4	1,660	0.6
Other	111,600	4.1	13,110	4.0	113,740	4.4	12,365	4.2
Provincial Nominee	3,125	0.1	930	0.3	2,945	0.1	870	0.3
Total	2,739,330	100.0%	324,755	100.0%	2,606,910	100.0%	295,115	100.0%

Notes: Sample, immigrants who arrived from ages 0 to 17 between the years of 1980 and 2004.

Table 11: Region of origin by admission class, Child Arrivals

	Skilled Worker	Family	Refugee	Business	Other <sup>1</sup>	Total
Males						
Europe/US/Australia/NZ	34.5	20.6	24.5	18.7	18.6	26.1
Middle East/Africa	7.2	3.6	4.6	4.4	3.7	5.2
Asia	50.0	48.7	56.5	74.2	43.8	53.8
Central/South America/Other	8.3	27	14.4	2.7	33.9	14.8
Total	100%	100%	100%	100%	100%	100%
Females						
Europe/US/Australia/NZ	35.7	20.9	25.6	18.5	19.1	26.8
Middle East/Africa	7.1	3.7	5.8	4.4	4.0	5.5
Asia	47.9	43.7	53.1	74.2	40.0	50.5
Central/South America/Other	9.3	31.7	15.5	2.9	37.0	17.3
Total	100%	100%	100%	100%	100%	100%

Notes: Sample, immigrants who arrived from ages 0 to 17 between the years of 1980 and 2004.

<sup>1</sup> Includes Live-in-Caregivers, Provincial Nominees and other immigrants.



Table 12: Summary statistics for Child Arrivals, Males

	Skilled Worker	Family	Refugee	Business	Live-in- Caregiver	Other	PNP
<b>1. Parent's Characteristics (Person observation)</b>							
Male	0.80 (0.40)	0.34 (0.47)		0.90 (0.31)		0.63 (0.48)	0.86 (0.34)
<b>Education</b> (Default High school or less)							
College	0.28 (0.45)	0.15 (0.36)		0.28 (0.45)		0.22 (0.42)	0.50 (0.50)
Bachelor	0.36 (0.48)	0.09 (0.29)		0.23 (0.42)		0.09 (0.28)	0.23 (0.42)
Graduate Degree	0.14 (0.34)	0.02 (0.13)		0.04 (0.20)		0.02 (0.13)	0.05 (0.23)
Income when Child 10 to 17 <sup>1</sup>	40,426	16,667		18,182		22,727	34,091
Income when Child 10 to 17 (with zero)	19,000 (45,000)	5,000 (13,000)		6,000 (27,000)		5,000 (13,000)	15,000 (37,000)
Income missing	0.53 (0.50)	0.70 (0.46)		0.67 (0.47)		0.78 (0.42)	0.56 (0.50)
<b>Knowledge of Official Language</b> (Default English)							
French	0.04 (0.2)	0.03 (0.18)		0.03 (0.16)		0.04 (0.20)	0.00 (0.05)
Bilingual	0.01 (0.11)	0.00 (0.06)		0.01 (0.10)		0.02 (0.14)	0.01 (0.08)
Allophone	0.55 (0.50)	0.69 (0.46)		0.73 (0.45)		0.46 (0.50)	0.63 (0.48)
<b>Marital Status</b> (Default Married)							
Widowed/Divorced/Separated	0.03 (0.18)	0.08 (0.27)		0.02 (0.14)		0.07 (0.25)	0.02 (0.15)
Single, Never Married	0.01 (0.12)	0.06 (0.24)		0.01 (0.08)		0.03 (0.18)	0.01 (0.12)
<b>2a. Characteristics of the Child Arrival (Person observation)</b>							
Age 0 to 10 at arrival	0.51 (0.50)	0.38 (0.48)	0.54 (0.50)	0.36 (0.48)	0.26 (0.44)	0.50 (0.50)	0.08 (0.27)
<b>Mother Tongue</b> (Default "Other")							
English	0.18 (0.39)	0.20 (0.40)	0.01 (0.07)	0.06 (0.25)	0.09 (0.28)	0.14 (0.34)	0.08 (0.28)
French	0.02 (0.14)	0.01 (0.08)	0.00 (0.06)	0.02 (0.12)	0.00 (0.00)	0.01 (0.08)	0.00 (0.05)
Return emigration	0.09 (0.28)	0.08 (0.27)	0.07 (0.26)	0.20 (0.40)	0.04 (0.19)	0.10 (0.30)	0.01 (0.11)
<b>2b. Characteristics of the Child Arrival (Person-year observation)</b>							
Age	30 (5.14)	32 (6.15)	31 (5.87)	30 (5.14)	28 (3.31)	30 (4.6)	26 (1.87)
Years-since-migration	13.71 (4.64)	12.33 (4.72)	14.23 (5.03)	12.24 (4.40)	10.98 (3.35)	13.33 (4.25)	9.46 (2.23)
Employment rates	0.842 (0.36)	0.827 (0.38)	0.823 (0.38)	0.729 (0.44)	0.933 (0.25)	0.82 (0.38)	0.851 (0.36)

Notes: Sample, male immigrants who arrived from ages 0 to 17 between the years of 1980 and 2004. Parental income, parental income missing, years-since-migration, employment rate, age and return emigration based on tax data. All other variables from landing records. Standard Deviations under means in parentheses.

<sup>1</sup> Calculated from PA variables *Income when Child 10 to 17 (with zero)* and *Income missing*.

Table 13: Summary Statistics for Child Arrivals, Females

	Skilled Worker	Family	Refugee	Business	Live-in- Caregiver	Other	PNP
<b>1. Parent's Characteristics (Person observation)</b>							
Male	0.80 (0.40)	0.30 (0.46)		0.89 (0.31)		0.61 (0.49)	0.86 (0.34)
<b>Education</b> (Default High school or less)							
College	0.28 (0.45)	0.15 (0.36)		0.29 (0.45)		0.22 (0.41)	0.47 (0.50)
Bachelor	0.36 (0.48)	0.09 (0.29)		0.22 (0.41)		0.08 (0.27)	0.23 (0.42)
Graduate Degree	0.14 (0.34)	0.02 (0.12)		0.04 (0.20)		0.02 (0.15)	0.06 (0.24)
Income when Child 10 to 17 <sup>1</sup>	40,426	17,333		19,063		23,636	36,364
Income when Child 10 to 17 (with zero)	19,000 (43,000)	5,200 (12,000)		6,100 (39,000)		5,200 (15,000)	16,000 (45,000)
Income missing	0.53 (0.50)	0.70 (0.46)		0.68 (0.47)		0.78 (0.41)	0.56 (0.50)
<b>Knowledge of Official Language</b> (Default English)							
French	0.04 (0.2)	0.04 (0.19)		0.03 (0.17)		0.05 (0.21)	0.00 (0.06)
Bilingual	0.01 (0.12)	0.00 (0.07)		0.01 (0.09)		0.02 (0.15)	0.01 (0.12)
Allophone	0.55 (0.50)	0.66 (0.47)		0.74 (0.44)		0.45 (0.50)	0.61 (0.49)
<b>Marital Status</b> (Default Married)							
Widowed/Divorced/Separated	0.04 (0.18)	0.08 (0.27)		0.02 (0.14)		0.07 (0.25)	0.02 (0.13)
Single, Never Married	0.01 (0.12)	0.06 (0.24)		0.01 (0.08)		0.04 (0.20)	0.01 (0.11)
<b>2a. Characteristics of the Child Arrival (Person observation)</b>							
Age 0 to 10 at arrival	0.51 (0.50)	0.40 (0.49)	0.56 (0.50)	0.37 (0.48)	0.27 (0.44)	0.50 (0.50)	0.06 (0.24)
<b>Mother Tongue</b> (Default "Other")							
English	0.19 (0.39)	0.22 (0.42)	0.01 (0.07)	0.06 (0.25)	0.11 (0.32)	0.15 (0.35)	0.09 (0.29)
French	0.02 (0.14)	0.01 (0.09)	0.00 (0.07)	0.02 (0.13)	0.00 (0.00)	0.01 (0.08)	0.00 (0.03)
Return emigration	0.08 (0.27)	0.05 (0.22)	0.05 (0.21)	0.19 (0.39)	0.02 (0.14)	0.07 (0.25)	0.00 (0.06)
<b>2b. Characteristics of the Child Arrival (Person-year observation)</b>							
Age	30 (5.14)	31 (6.01)	31 (5.66)	30 (5.12)	28 (3.62)	30 (4.58)	26 (1.89)
Years-since-migration	13.73 (4.63)	12.34 (4.66)	14.26 (5.01)	12.22 (4.39)	10.99 (3.35)	13.23 (4.24)	9.52 (2.15)
Employment rates	0.822 (0.38)	0.790 (0.41)	0.780 (0.41)	0.724 (0.45)	0.885 (0.32)	0.788 (0.41)	0.760 (0.43)

Notes: Sample, female immigrants who arrived from ages 0 to 17 between the years of 1980 and 2004. Parental income, parental income missing, years-since-migration, employment rate, age and return emigration based on tax data. All other variables from landing records. Standard Deviations under means in parentheses.

<sup>1</sup> Calculated from PA variables *Income when Child 10 to 17 (with zero)* and *Income missing*.

Table 14: Earnings regressions, Child Arrivals (0-17), males

	(1)	(2)	(3)	(4)	(5)	(6)
<b>Admission Category</b> (Default Skilled Workers)						
Family Class	-0.187**	-0.171**	-0.139**	-0.0841**	-0.0868**	-0.0939**
	(0.0041)	(0.0046)	(0.0051)	(0.0058)	(0.0058)	(0.0063)
Refugee	-0.168**					
	(0.0042)					
Business Class	-0.119**	-0.117**	-0.108**	-0.0821**	-0.0816**	-0.0283**
	(0.0056)	(0.0058)	(0.0059)	(0.0060)	(0.0060)	(0.0064)
Live-in-Caregiver	-0.0665**					
	(0.0174)					
Other	-0.125**	-0.140**	-0.116**	-0.0661**	-0.0685**	-0.0701**
	(0.00831)	(0.0128)	(0.0129)	(0.0142)	(0.0142)	(0.0142)
Provincial Nominee Program	0.0643*	0.0898**	0.0857**	0.117**	0.203**	0.216**
	(0.0296)	(0.0298)	(0.0298)	(0.0297)	(0.0303)	(0.0296)
<b>Characteristics of the Principal Applicant</b>						
<b>Parental Education</b> (Default High school or less)						
College			0.0823**	0.0655**	0.0647**	0.0656**
			(0.0050)	(0.0051)	(0.0051)	(0.0052)
Bachelor			0.0711**	0.0668**	0.0777**	0.103**
			(0.0055)	(0.0055)	(0.0056)	(0.0059)
Graduate Degree			0.0425**	0.0350**	0.0457**	0.0823**
			(0.0088)	(0.0090)	(0.0091)	(0.0092)
<b>Knowledge of Official Language</b> (Default English)						
French				-0.0416**	-0.0410**	-0.0456**
				(0.0121)	(0.0121)	(0.0154)
Bilingual				0.0659**	0.0759**	0.0488*
				(0.0215)	(0.0215)	(0.0221)
Allophone				-0.0667**	-0.0700**	-0.0645**
				(0.0043)	(0.0043)	(0.0059)
PA is Male				0.0320**	0.0117*	0.000386

				(0.0052)	(0.0053)	(0.0053)
Age of immigration				-0.0049**	0.0000	0.0008*
				(0.0003)	(0.0004)	(0.0004)
Income at ages 10 to 17 missing				-0.0192**	-0.0163**	-0.0180**
				(0.0050)	(0.0048)	(0.0048)
(Income at ages 10 to 17)/10,000				0.0052**	0.0032**	0.0021*
				(0.0010)	(0.0009)	(0.0008)
<b>Personal Characteristics</b>						
Years-Since-Migration (YSM)					0.0147**	0.0425**
					(0.0015)	(0.0017)
YSM <sup>2</sup> /100					-0.0034	-0.0134**
					(0.0041)	(0.0041)
<b>Mother Tongue (Default “Other”)</b>						
English						0.0201*
						(0.0089)
French						0.0173
						(0.0212)
Additional PA Controls	No	No	No	Yes	Yes	Yes
Additional Child Controls	No	No	No	No	No	Yes
R-squared	0.106	0.112	0.113	0.115	0.117	0.127
Observations	2,244,550	1,438,055	1,438,055	1,438,055	1,438,055	1,438,055
Individuals	297,925	199,375	199,375	199,375	199,375	199,375

Notes: Robust standard errors clustered on individuals in parentheses, \*\* p<0.01, \* p<0.05, + p<0.10. The dependent variable is the natural logarithm of annual employment earnings. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional PA controls include: Came prior controls, and PA marital status at landing. Additional Child controls include: Country/Region of Birth indicators, Arrival Cohort indicators and Taxfile year of first earnings indicators. Sample, males who immigrated ages 0 to 17 between the years of 1980 and 2004. Sample includes tax returns from 1987 to 2014, for when these individuals were 24 to 52.

Table 15: Earnings regressions, Child Arrivals (0-17), females

	(1)	(2)	(3)	(4)	(5)	(6)
<b>Admission Category</b> (Default Skilled Workers)						
Family Class	-0.238** (0.0042)	-0.226** (0.0048)	-0.184** (0.0053)	-0.171** (0.0059)	-0.169** (0.0060)	-0.146** (0.0065)
Refugee	-0.180** (0.0045)					
Business Class	-0.0653** (0.0059)	-0.0654** (0.0061)	-0.0507** (0.0062)	-0.0295** (0.0063)	-0.0282** (0.0063)	-0.0179** (0.0067)
Live-in-Caregiver	-0.0817** (0.0188)					
Other	-0.142** (0.00817)	-0.130** (0.0119)	-0.0954** (0.0119)	-0.0534** (0.0131)	-0.0647** (0.0131)	-0.0542** (0.0131)
Provincial Nominee Program	-0.140** (0.0350)	-0.134** (0.0357)	-0.130** (0.0357)	-0.115** (0.0355)	0.0221 (0.0359)	0.0621 <sup>+</sup> (0.0359)
<b>Characteristics of the Principal Applicant</b>						
<b>Parental Education</b> (Default High school or less)						
College			0.0818** (0.0052)	0.0721** (0.0053)	0.0714** (0.0053)	0.0777** (0.0054)
Bachelor			0.113** (0.0057)	0.111** (0.0057)	0.124** (0.0058)	0.150** (0.0061)
Graduate Degree			0.0672** (0.0091)	0.0677** (0.0092)	0.0816** (0.0093)	0.127** (0.0094)
<b>Knowledge of Official Language</b> (Default English)						
French				-0.0122 (0.0125)	-0.0125 (0.0125)	-0.0182 (0.0153)
Bilingual				0.0923** (0.0217)	0.108** (0.0215)	0.100** (0.0217)
Allophone				-0.0262** (0.0045)	-0.0370** (0.0045)	-0.105** (0.0061)
Income at ages 10 to 17 missing				-0.0474**	-0.0365**	-0.0247**

				(0.0047)	(0.0047)	(0.0047)
(Income at ages 10 to 17)/10,000				0.0050**	0.0025**	0.0036**
				(0.0008)	(0.0007)	(0.0007)
<b>Personal Characteristics</b>						
Years-Since-Migration (YSM)					0.0360**	0.0605**
					(0.0016)	(0.0018)
YSM <sup>2</sup> /100					-0.0401**	-0.0527**
					(0.0044)	(0.0045)
<b>Mother Tongue</b> (Default “Other”)						
English						-0.0182*
						(0.0092)
French						-0.0363 <sup>+</sup>
						(0.0217)
Additional PA Controls	No	No	No	Yes	Yes	Yes
Additional Child Controls	No	No	No	No	No	Yes
R-squared	0.057	0.059	0.060	0.062	0.067	0.079
Observations	2,064,715	1,334,645	1,334,645	1,334,645	1,334,645	1,334,645
Individuals	272,190	182,435	182,435	182,435	182,435	182,435

Notes: Robust standard errors clustered on individuals in parentheses, \*\* p<0.01, \* p<0.05, + p<0.10. The dependent variable is the natural logarithm of annual employment earnings. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional PA controls include: Came prior controls, and PA marital status at landing. Additional Child controls include: Country/Region of Birth indicators, Arrival Cohort indicators and Taxfile year of first earnings indicators. Sample, females who immigrated ages 0 to 17 between the years of 1980 and 2004. Sample includes tax returns from 1987 to 2014, for when these individuals were 24 to 52.

Table 16: Earnings regressions, Child Arrivals by age of arrival, males

	Age of arrival 0 to 10				Age of arrival 11 to 17			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Admission Category</b> (Default Skilled Workers)								
Family Class	-0.180** (0.0052)	-0.168** (0.0059)	-0.0767** (0.0074)	-0.0960** (0.0081)	-0.159** (0.0066)	-0.135** (0.0076)	-0.0998** (0.0097)	-0.0756** (0.0104)
Refugee	-0.185** (0.0060)				-0.152** (0.0058)			
Business Class	-0.151** (0.0073)	-0.152** (0.0076)	-0.113** (0.0078)	-0.0428** (0.0085)	-0.0170 <sup>+</sup> (0.0088)	-0.0119 (0.0090)	-0.0085 (0.0093)	0.0088 (0.0098)
Live-in-Caregiver	-0.0238 (0.0192)				-0.106* (0.0418)			
Other	-0.119** (0.0112)	-0.140** (0.0162)	-0.0749** (0.0179)	-0.0817** (0.0179)	-0.113** (0.0120)	-0.101** (0.0204)	-0.0451* (0.0226)	-0.0272 (0.0225)
Provincial Nominee Program	0.105** (0.0310)	0.138** (0.0314)	0.161** (0.0315)	0.227** (0.0312)	0.146 (0.102)	0.158 (0.102)	0.175 <sup>+</sup> (0.103)	0.221* (0.106)
<b>Characteristics of the Principal Applicant</b>								
<b>Parental Education</b> (Default High school or less)								
College			0.0791** (0.0070)	0.0788** (0.0071)			0.0390** (0.0073)	0.0397** (0.0075)
Bachelor			0.0774** (0.0072)	0.115** (0.0079)			0.0492** (0.0084)	0.0771** (0.0089)
Graduate Degree			0.0605** (0.0116)	0.114** (0.0119)			-0.00374 (0.0140)	0.0241 <sup>+</sup> (0.0142)
<b>Knowledge of Official Language</b> (Default English)								
French			-0.0482** (0.0164)	-0.0602** (0.0203)			-0.0175 (0.0176)	0.00246 (0.0230)
Bilingual			0.0634* (0.0253)	0.0429 (0.0263)			0.0614 (0.0389)	0.0514 (0.0395)
Allophone			-0.120**	-0.0898**			0.0207**	-0.00875

			(0.0056)	(0.0074)			(0.0067)	(0.0099)
PA is Male			0.0258**	0.00287			0.0112	0.00167
			(0.0068)	(0.0069)			(0.0083)	(0.0084)
Age of immigration			-0.00214**	0.0016**			-0.0016**	0.00013
			(0.0005)	(0.0005)			(0.0005)	(0.0006)
Income at ages 10 to 17 missing			-0.0337**	-0.0308**			0.0166*	0.0134 <sup>+</sup>
			(0.00696)	(0.00662)			(0.00763)	(0.00740)
(Income at ages 10 to 17)/10,000			0.0060**	0.0037*			0.0054**	0.0038**
			(0.0020)	(0.0016)			(0.0012)	(0.0011)
<b>Personal Characteristics</b>								
Years-Since-Migration (YSM)				0.0480**				0.0522**
				(0.0031)				(0.0054)
YSM <sup>2</sup> /100				-0.0290**				-0.0332**
				(0.0094)				(0.0121)
<b>Mother Tongue (Default "Other")</b>								
English				0.0660**				-0.0185
				(0.0120)				(0.0132)
French				0.0438				-0.0203
				(0.0290)				(0.0301)
Additional PA Controls	No	No	Yes	Yes	No	No	Yes	Yes
Additional Child Control	No	No	No	Yes	No	No	No	Yes
R-squared	0.108	0.115	0.120	0.132	0.111	0.114	0.116	0.128
Observations	1,393,180	907,525	907,525	907,525	851,370	530,530	530,530	530,530
Individuals	159,565	110,035	110,035	110,035	138,360	89,340	89,340	89,340

Notes: Robust standard errors clustered on individuals in parentheses, \*\* p<0.01, \* p<0.05, + p<0.10. The dependent variable is the natural logarithm of annual employment earnings. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional PA controls include: Came prior controls, and PA marital status at landing. Additional Child controls include: Country/Region of Birth indicators, Arrival Cohort indicators and Taxfile year of first earnings indicators. Sample, males who immigrated ages 0 to 10 or 11 to 17 between the years of 1980 and 2004. Tax returns from 1987 to 2014, for when these individuals were 24 to 52.



Table 17: Earnings regressions, Child Arrivals by age of arrival, females

	Age of arrival 0 to 10				Age of arrival 11 to 17			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Admission Category</b> (Default Skilled Workers)								
Family Class	-0.243** (0.0055)	-0.237** (0.0062)	-0.165** (0.0077)	-0.141** (0.0085)	-0.183** (0.0067)	-0.158** (0.0076)	-0.169** (0.0096)	-0.131** (0.0104)
Refugee	-0.246** (0.0067)				-0.124** (0.0060)			
Business Class	-0.0864** (0.0077)	-0.0895** (0.0080)	-0.0423** (0.0083)	-0.0286** (0.0089)	0.0176+ (0.0090)	0.0189* (0.0093)	0.0105 (0.0096)	0.00821 (0.0100)
Live-in-Caregiver	-0.0368+ (0.0209)				-0.0682 (0.0430)			
Other	-0.124** (0.0112)	-0.106** (0.0152)	-0.0413* (0.0165)	-0.0549** (0.0167)	-0.149** (0.0114)	-0.136** (0.0181)	-0.0744** (0.0203)	-0.0373+ (0.0206)
Provincial Nominee Program	-0.0960** (0.0363)	-0.0862* (0.0373)	-0.0643+ (0.0371)	0.0541 (0.0375)	-0.0110 (0.1500)	-0.0111 (0.151)	-0.00872 (0.1530)	0.120 (0.1480)
<b>Characteristics of the Principal Applicant</b>								
<b>Parental Education</b> (Default High school or less)								
College			0.0896** (0.0073)	0.0924** (0.0074)			0.0437** (0.0075)	0.0533** (0.0076)
Bachelor			0.132** (0.0077)	0.177** (0.0082)			0.0849** (0.0083)	0.109** (0.0089)
Graduate Degree			0.0886** (0.0122)	0.158** (0.0125)			0.0406** (0.0139)	0.0767** (0.0141)
<b>Knowledge of Official Language</b> (Default English)								
French			-0.0218 (0.0172)	-0.0059 (0.0203)			0.0212 (0.0178)	-0.0081 (0.0230)
Bilingual			0.0919** (0.0254)	0.119** (0.0257)			0.102** (0.0396)	0.0481 (0.0402)
Allophone			-0.0958**	-0.130**			0.0766**	-0.0493**

			(0.0058)	(0.0078)			(0.0068)	(0.0101)
PA is Male			-0.0379**	-0.0414**			-0.0660**	-0.0509**
			(0.0070)	(0.0071)			(0.0084)	(0.0084)
Age of immigration			0.0017**	0.0039**			0.0034**	0.0026**
			(0.0005)	(0.0005)			(0.0005)	(0.0006)
Income at 17 missing			-0.0611**	-0.0323**			-0.0095	0.0056
			(0.0063)	(0.0065)			(0.0072)	(0.0072)
(Income at ages 10 to 17)/10,000			0.0058**	0.0057**			0.0045**	0.0052**
			(0.0014)	(0.0013)			(0.0010)	(0.0011)
<b>Personal Characteristics</b>								
Years-Since-Migration (YSM)				0.0664**				0.0678**
				(0.0033)				(0.0059)
YSM <sup>2</sup> /100				-0.0601**				-0.0775**
				(0.0102)				(0.0134)
<b>Mother Tongue (Default "Other")</b>								
English				0.0323*				-0.0601**
				(0.0125)				(0.0134)
French				-0.00607				-0.0608*
				(0.0305)				(0.0301)
<hr/>								
Additional PA Controls	No	No	Yes	Yes	No	No	Yes	Yes
Additional Child Control	No	No	No	Yes	No	No	No	Yes
<hr/>								
R-squared	0.065	0.066	0.071	0.086	0.055	0.056	0.059	0.075
Observations	1,243,105	824,450	824,450	824,450	821,610	510,195	510,195	510,195
Individuals	141,850	98,640	98,640	98,640	130,335	83,795	83,795	83,795
<hr/>								

Notes: Robust standard errors clustered on individuals in parentheses, \*\* p<0.01, \* p<0.05, + p<0.10. The dependent variable is the natural logarithm of annual employment earnings. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional PA controls include: Came prior controls, and PA marital status at landing. Additional Child controls include: Country/Region of Birth indicators, Arrival Cohort indicators and Taxfile year of first earnings indicators. Sample, females who immigrated ages 0 to 10 or 11 to 17 between the years of 1980 and 2004. Tax returns from 1987 to 2014, for when these individuals were 24 to 52.

Table 18: Wage + self-employment earnings regressions, Child Arrivals

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Males				Females			
<b>Admission Category</b> (Default Skilled Workers)								
Family Class	-0.185**	-0.136**	0.0753**	-0.0924**	-0.582**	-0.501**	-0.278**	-0.409**
	(0.0125)	(0.0141)	(0.0180)	(0.0198)	(0.0161)	(0.0182)	(0.0227)	(0.0249)
Refugee	-0.254**				-0.543**			
	(0.0133)				(0.0173)			
Business Class	-0.990**	-0.971**	-0.876**	-0.457**	-0.898**	-0.891**	-0.756**	-0.430**
	(0.0186)	(0.0192)	(0.0197)	(0.0201)	(0.0220)	(0.0227)	(0.0236)	(0.0243)
Live-in-Caregiver	0.523**				0.258**			
	(0.0469)				(0.0717)			
Other	-0.228**	-0.243**	-0.179**	-0.194**	-0.484**	-0.492**	-0.277**	-0.292**
	(0.0259)	(0.0386)	(0.0426)	(0.0430)	(0.0317)	(0.0455)	(0.0497)	(0.0503)
Provincial Nominee Program	0.0268	0.0794	0.146	0.459**	-1.167**	-1.101**	-1.029**	-0.486**
	(0.0907)	(0.0920)	(0.0918)	(0.0895)	(0.139)	(0.141)	(0.141)	(0.139)
Characteristics of the PA	No	No	Yes	Yes	No	No	Yes	Yes
Personal Characteristics	No	No	No	Yes	No	No	No	Yes
R-squared	0.030	0.038	0.044	0.066	0.012	0.014	0.019	0.044
Observations	2,736,995	1,761,165	1,761,165	1,761,165	2,605,160	1,673,735	1,673,735	1,673,735
Individuals	324,730	219,090	219,090	219,090	295,105	199,135	199,135	199,135

Notes: Robust standard errors clustered on individuals in parentheses, \*\* p<0.01, \* p<0.05, + p<0.10. The dependent variable is the natural logarithm of annual employment and net self-employment earnings. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional Characteristics of the PA controls include: Highest level of education, Knowledge of official language, Age of immigration, Gender, Marital status, Income at ages 10 to 17, and Came prior controls. Additional Personal Characteristics controls include: Cohort, YSM, Mother Tongue, Country/Region of birth and Taxfile year of first earnings controls. Sample, male and female arriving at ages 0 to 17 between the years of 1980 and 2004. Tax returns from 1987 to 2014, for when these individuals were 24 to 52.

Table 19: Linear Probability Model of employment status, Child Arrivals

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Males				Females			
<b>Admission Category</b> (Default Skilled Workers)								
Family Class	-0.0148** (0.0015)	-0.0165** (0.0017)	-0.0008 (0.0021)	-0.0134** (0.0022)	-0.0283** (0.0016)	-0.0232** (0.0018)	-0.0076** (0.0023)	-0.0274** (0.0025)
Refugee	-0.0217** (0.0015)				-0.0416** (0.0018)			
Business Class	-0.107** (0.0021)	-0.105** (0.0021)	-0.0943** (0.0022)	-0.0632** (0.0023)	-0.0959** (0.0022)	-0.0960** (0.0023)	-0.0865** (0.0024)	-0.0544** (0.0025)
Live-in-Caregiver	0.0880** (0.0047)				0.0560** (0.0067)			
Other	-0.0203** (0.0029)	-0.0315** (0.0044)	-0.0319** (0.0048)	-0.0340** (0.0048)	-0.0297** (0.0031)	-0.0333** (0.0045)	-0.0232** (0.0049)	-0.0260** (0.0050)
Provincial Nominee Program	-0.0283** (0.0106)	-0.0232* (0.0108)	-0.0154 (0.0108)	0.0243* (0.0107)	-0.113** (0.0142)	-0.107** (0.0144)	-0.102** (0.0144)	-0.0519** (0.0142)
Characteristics of the PA	No	No	Yes	Yes	No	No	Yes	Yes
Personal Characteristics	No	No	No	Yes	No	No	No	Yes
R-squared	0.014	0.017	0.022	0.036	0.010	0.012	0.016	0.034
Observations	2,739,330	1,762,175	1,762,175	1,762,175	2,606,910	1,674,525	1,674,525	1,674,525
Individuals	324,755	219,105	219,105	219,105	295,115	199,140	199,140	199,140

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is an indicator for employment status (non-zero employment earnings). Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional Characteristics of the PA controls include: Highest level of education, Knowledge of official language, Age of immigration, Gender, Marital status, Income at ages 10 to 17, and Came prior controls. Additional Personal Characteristics controls include: Cohort, YSM, Mother Tongue, Country/Region of birth and Taxfile year of first earnings controls. Sample, male and female arriving at ages 0 to 17 between the years of 1980 and 2004. Tax returns from 1987 to 2014, for when these individuals were 24 to 52.

Table 20: Earnings regressions incorporating zero earnings observations, Child Arrivals

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Males				Females			
<b>Admission Category</b> (Default Skilled Workers)								
Family Class	-0.315**	-0.318**	-0.0857**	-0.220**	-0.473**	-0.414**	-0.215**	-0.391**
	(0.0165)	(0.0189)	(0.0234)	(0.0253)	(0.0176)	(0.0201)	(0.0250)	(0.0274)
Refugee	-0.368**				-0.561**			
	(0.0171)				(0.0192)			
Business Class	-1.183**	-1.165**	-1.022**	-0.662**	-1.011**	-1.012**	-0.889**	-0.559**
	(0.0228)	(0.0235)	(0.0244)	(0.0258)	(0.0244)	(0.0253)	(0.0262)	(0.0275)
Live-in-Caregiver	0.829**				0.487**			
	(0.0544)				(0.0744)			
Other	-0.318**	-0.445**	-0.385**	-0.407**	-0.413**	-0.440**	-0.277**	-0.303**
	(0.0323)	(0.0488)	(0.0537)	(0.0541)	(0.0342)	(0.0495)	(0.0542)	(0.0550)
Provincial Nominee Program	-0.248*	-0.177	-0.0755	0.404**	-1.237**	-1.177**	-1.109**	-0.465**
	(0.114)	(0.116)	(0.116)	(0.115)	(0.146)	(0.148)	(0.148)	(0.146)
Characteristics of the PA	No	No	Yes	Yes	No	No	Yes	Yes
Personal Characteristics	No	No	No	Yes	No	No	No	Yes
R-squared	0.020	0.025	0.031	0.049	0.011	0.012	0.017	0.041
Observations	2,739,330	1,762,175	1,762,175	1,762,175	2,606,910	1,674,525	1,674,525	1,674,525
Individuals	324,755	219,105	219,105	219,105	295,115	199,140	199,140	199,140

Notes: Robust standard errors clustered on individuals in parentheses, \*\* p<0.01, \* p<0.05, + p<0.10. The dependent variable is the natural logarithm of annual employment earnings where we give people who filed taxes but had zero earnings \$1 before taking the natural log. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional Characteristics of the PA controls include: Highest level of education, Knowledge of official language, Age of immigration, Gender, Marital status, Income at ages 10 to 17, and Came prior controls. Additional Personal Characteristics controls include: Cohort, YSM, Mother Tongue, Country/Region of birth and Taxfile year of first earnings controls. Sample, male and female arriving at ages 0 to 17 between the years of 1980 and 2004. Tax returns from 1987 to 2014, for when these individuals were 24 to 52.

Table 21: Linear Probability Model of emigration, Child Arrivals

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Males				Females			
<b>Admission Category</b> (Default Skilled Workers)								
Family Class	-0.0008 (0.0009)	-0.0043** (0.0010)	-0.0108** (0.0013)	-0.0068** (0.0015)	-0.0095** (0.0008)	-0.0095** (0.0009)	-0.0141** (0.0012)	-0.0095** (0.0013)
Refugee	-0.0047** (0.0009)				-0.0142** (0.0008)			
Business Class	0.0516** (0.0015)	0.0502** (0.0015)	0.0465** (0.0015)	0.0262** (0.0016)	0.0477** (0.0014)	0.0476** (0.0015)	0.0449** (0.0015)	0.0263** (0.0016)
Live-in-Caregiver	-0.0332** (0.0032)				-0.0299** (0.0032)			
Other	0.0007 (0.0018)	0.0045+ (0.0027)	0.0009 (0.0031)	0.0044 (0.0032)	-0.0094** (0.0015)	-0.0081** (0.0021)	-0.0110** (0.0025)	-0.0081** (0.0026)
Provincial Nominee Program	-0.0443** (0.0027)	-0.0420** (0.0030)	-0.0464** (0.0030)	0.0018 (0.0032)	-0.0463** (0.0015)	-0.0445** (0.0017)	-0.0489** (0.0018)	-0.0062** (0.0021)
Characteristics of the PA	No	No	Yes	Yes	No	No	Yes	Yes
Personal Characteristics	No	No	No	Yes	No	No	No	Yes
R-squared	0.024	0.028	0.032	0.065	0.025	0.030	0.033	0.063
Observations	2,739,330	1,762,175	1,762,175	1,762,175	2,606,910	1,674,525	1,674,525	1,674,525
Individuals	324,755	219,105	219,105	219,105	295,115	199,140	199,140	199,140

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is coded as one if the respondent did not file taxes between 2012 and 2014 and had not deceased and zero otherwise. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional Characteristics of the PA controls include: Highest level of education, Knowledge of official language, Age of immigration, Gender, Marital status, Income at ages 10 to 17, and Came prior controls. Additional Personal Characteristics controls include: Cohort, YSM, Mother Tongue, Country/Region of birth and Taxfile year of first earnings controls. Sample, male and female arriving at ages 0 to 17 between the years of 1980 and 2004. Tax returns from 1987 to 2014, for when these individuals were 24 to 52.

Table 22: Earnings regressions, Child Arrivals with at least 10 consecutive tax returns

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Males				Females			
<b>Admission Category</b> (Default Skilled Workers)								
Family Class	-0.176**	-0.169**	-0.0870**	-0.0852**	-0.223**	-0.227**	-0.181**	-0.131**
	(0.0058)	(0.0066)	(0.0083)	(0.0092)	(0.0059)	(0.0067)	(0.0082)	(0.0091)
Refugee	-0.138**				-0.128**			
	(0.0063)				(0.0068)			
Business Class	-0.0610**	-0.0575**	-0.0278**	-0.0147	0.0250**	0.0242**	0.0499**	0.0204*
	(0.0090)	(0.0093)	(0.0096)	(0.0102)	(0.0087)	(0.0090)	(0.0092)	(0.0098)
Live-in-Caregiver	-0.211**				-0.196**			
	(0.0266)				(0.0342)			
Other	-0.0917**	-0.0972**	-0.0125	-0.0260	-0.115**	-0.0943**	-0.0213	-0.0092
	(0.0127)	(0.0206)	(0.0227)	(0.0225)	(0.0123)	(0.0185)	(0.0199)	(0.0198)
Provincial Nominee Program	-0.109	-0.0945	-0.0525	0.0780	-0.268 <sup>+</sup>	-0.278 <sup>+</sup>	-0.228 <sup>+</sup>	-0.146
	(0.0958)	(0.0961)	(0.0993)	(0.0957)	(0.141)	(0.142)	(0.125)	(0.116)
Characteristics of the PA	No	No	Yes	Yes	No	No	Yes	Yes
Personal Characteristics	No	No	No	Yes	No	No	No	Yes
R-squared	0.153	0.157	0.163	0.176	0.087	0.089	0.096	0.111
Observations	811,830	516,120	516,120	516,120	761,700	491020	491020	491020
Individuals	54,505	35,495	35,495	35,495	52,185	34,180	34,180	34,180

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is the natural logarithm of annual employment. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional Characteristics of the PA controls include: Highest level of education, Knowledge of official language, Age of immigration, Gender, Marital status, Income at ages 10 to 17, and Came prior controls. Additional Personal Characteristics controls include: Cohort, YSM, Mother Tongue, Country/Region of birth and Taxfile year of first earnings controls. Sample, male and female arriving at ages 0 to 17 between the years of 1980 and 2004. Tax returns from 1987 to 2014, for when these individuals were 24 to 52. Sample restricted to those who had filed at least 10 years of consecutive tax returns.

# A Online Appendix

Table A1: Earnings regressions, Adult Arrivals with 10 or more years of tax returns

	(1)	(2)	(3)	(4)
	Males		Females	
<b>Admission/PA status interactions</b> (Default Skilled Worker PA)				
Family	-0.341** (0.0021)	-0.220** (0.0023)	-0.484** (0.0026)	-0.306** (0.0027)
Skilled Worker Spouse/Dependent	-0.200** (0.0033)	-0.145** (0.0032)	-0.353** (0.0027)	-0.241** (0.0026)
Business PA	-0.571** (0.0052)	-0.308** (0.0053)	-0.627** (0.0126)	-0.390** (0.0124)
Business Spouse/Dependent	-0.618** (0.0123)	-0.328** (0.0118)	-0.685** (0.0053)	-0.397** (0.0054)
PNP PA	0.0782** (0.0113)	0.133** (0.0104)	0.233** (0.0206)	0.287** (0.0196)
PNP Spouse/Dependent	-0.190** (0.0265)	-0.105** (0.0253)	-0.349** (0.0141)	-0.183** (0.0134)
Live-in-Caregiver PA	-0.270** (0.0148)	-0.183** (0.0146)	-0.228** (0.0036)	-0.182** (0.0039)
Live-in-Caregiver Spouse/Dependent	-0.176** (0.0068)	-0.0843** (0.0074)	-0.174** (0.034)	-0.115** (0.0317)
Refugee	-0.523** (0.0024)	-0.344** (0.0028)	-0.555** (0.0031)	-0.298** (0.0034)
Other	-0.557** (0.0040)	-0.337** (0.0040)	-0.512** (0.0047)	-0.286** (0.0047)
Cohort/YSM/Lived in Canada Prior Controls	Yes	Yes	Yes	Yes
Highest Level of Education	No	Yes	No	Yes
Knowledge of an Official Language/Mother Tongue	No	Yes	No	Yes
YSM x Cohort interactions	No	Yes	No	Yes
Country/Region of Birth Controls	No	Yes	No	Yes
R-squared	0.123	0.172	0.108	0.147
Observations	11,529,740	11,529,740	10,560,290	10,560,290
Individuals	878,050	878,050	860,040	860,040

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is the natural logarithm of annual employment. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Sample, adult male and female immigrants aged between 25-59 at arrival, who arrived between 1980 and 2013. Sample includes tax returns for the years when these individuals were between 25 and 60. Sample restricted to those who had filed at least 10 tax returns.



Table A2: Wage + self-employment earnings regressions, Parents

	(1)	(2)	(3)	(4)
	Males		Females	
<b>Admission/PA status interactions (Default Skilled Worker PA)</b>				
Family	-0.141** (0.0241)	-0.229** (0.0263)	-1.637** (0.0221)	-1.130** (0.0263)
Business PA	-2.648** (0.0191)	-1.830** (0.0201)	-3.233** (0.0487)	-1.652** (0.0540)
PNP PA	0.111* (0.0543)	0.0796 (0.0508)	0.138 (0.141)	0.113 (0.131)
Live-in-Caregiver PA	0.517** (0.174)	0.0168 (0.175)	-0.0111 (0.155)	-0.101 (0.150)
Live-in-Caregiver Spouse/Dependent	0.914** (0.0379)	0.250** (0.0417)	0.655+ (0.344)	-0.126 (0.305)
Refugee	-1.430** (0.0158)	-1.262** (0.0191)	-2.690** (0.0286)	-1.423** (0.0328)
Other	-1.071** (0.0488)	-1.009** (0.0489)	-1.368** (0.0665)	-0.664** (0.0647)
Cohort and YSM Controls	Yes	Yes	Yes	Yes
Lived in Canada Prior Controls	Yes	Yes	Yes	Yes
Highest Level of Education	No	Yes	No	Yes
Knowledge of an Official Language Controls	No	Yes	No	Yes
Mother Tongue Controls	No	Yes	No	Yes
YSM x Cohort interactions	No	Yes	No	Yes
Country/Region of Birth Controls	No	Yes	No	Yes
R-squared	0.134	0.175	0.121	0.184
Observations	4,257,140	4,257,140	2,045,415	2,045,415
Individuals	281,335	281,335	124,330	124,330

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is the natural logarithm of annual employment and net self-employment earnings. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Sample restricted to those who are PAs and the parent of one of the individuals in our Child Arrivals sample. Sample includes tax returns for the years when these individuals were between 25 and 60.

Table A3: Earnings regressions, Child Arrivals (0-17) with a Male Principal Applicant

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Males				Females			
<b>Admission Category</b> (Default Skilled Workers)								
Family Class	-0.178**	-0.182**	-0.0937**	-0.0961**	-0.246**	-0.248**	-0.187**	-0.183**
	(0.0067)	(0.0067)	(0.0081)	(0.0089)	(0.0073)	(0.0073)	(0.0086)	(0.0097)
Refugee	-0.150**				-0.136**			
	(0.0052)				(0.0056)			
Business Class	-0.113**	-0.112**	-0.0736**	-0.0244**	-0.0565**	-0.0564**	-0.0281**	-0.0210**
	(0.0062)	(0.0062)	(0.0065)	(0.0069)	(0.0065)	(0.0065)	(0.0069)	(0.0072)
Live-in-Caregiver	-0.0430*				-0.0436 <sup>+</sup>			
	(0.0203)				(0.0223)			
Other	-0.102**	-0.103**	-0.0359 <sup>+</sup>	-0.0627**	-0.0794**	-0.0807**	-0.0112	-0.0318 <sup>+</sup>
	(0.0166)	(0.0165)	(0.0184)	(0.0184)	(0.0149)	(0.0148)	(0.0165)	(0.0167)
Provincial Nominee Program	0.0839*	0.0903**	0.122**	0.233**	-0.136**	-0.125**	-0.105**	0.101*
	(0.0328)	(0.0331)	(0.0332)	(0.0330)	(0.0393)	(0.0398)	(0.0396)	(0.0399)
Characteristics of the PA	No	No	Yes	Yes	No	No	Yes	Yes
Personal Characteristics	No	No	No	Yes	No	No	No	Yes
R-squared	0.112	0.115	0.119	0.131	0.057	0.059	0.061	0.079
Observations	1,319,315	1,024,510	1,024,510	1,024,510	1,181,240	922,390	922,390	922,390
Individuals	178,405	141,590	141,590	141,590	158,930	126,455	126,455	126,455

Notes: Robust standard errors clustered on individuals in parentheses, \*\* p<0.01, \* p<0.05, + p<0.10. The dependent variable is the natural logarithm of annual employment. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional Characteristics of the PA controls include: Highest level of education, Knowledge of official language, Age of immigration, Gender, Marital status, Income at ages 10 to 17, and Came prior controls. Additional Personal Characteristics controls include: Cohort, YSM, Mother Tongue, Country/Region of birth and Taxfile year of first earnings controls. Sample, male and female arriving at ages 0 to 17 between the years of 1980 and 2004. Tax returns from 1987 to 2014, for when these individuals were 24 to 52. Sample restricted to those who had a male principal applicant.

Table A4: Earnings regressions, Child Arrivals with at least 10 tax returns

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Males				Females			
<b>Admission Category</b> (Default Skilled Workers)								
Family Class	-0.219**	-0.202**	-0.110**	-0.0974**	-0.245**	-0.239**	-0.186**	-0.130**
	(0.0053)	(0.0061)	(0.0075)	(0.0082)	(0.0055)	(0.0063)	(0.0077)	(0.0084)
Refugee	-0.178**				-0.160**			
	(0.0057)				(0.0063)			
Business Class	-0.0577**	-0.0545**	-0.0215*	-0.0071	0.0119	0.0107	0.0403**	0.0120
	(0.0078)	(0.0082)	(0.0084)	(0.0091)	(0.0082)	(0.0085)	(0.0088)	(0.0093)
Live-in-Caregiver	-0.137**				-0.112**			
	(0.0289)				(0.0320)			
Other	-0.107**	-0.099**	-0.0083	-0.0332	-0.104**	-0.0721**	0.0030	-0.0060
	(0.0118)	(0.0190)	(0.0208)	(0.0207)	(0.0115)	(0.0173)	(0.0186)	(0.0188)
Characteristics of the PA	No	No	Yes	Yes	No	No	Yes	Yes
Personal Characteristics	No	No	No	Yes	No	No	No	Yes
R-squared	0.110	0.114	0.121	0.133	0.060	0.062	0.068	0.086
Observations	1,341,605	823,965	823,965	823,965	1,235,295	773,680	773,680	773,680
Individuals	90,755	56,900	56,900	56,900	84,850	53,865	53,865	53,865

Notes: Robust standard errors clustered on individuals in parentheses, \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.10$ . The dependent variable is the natural logarithm of annual employment. Other controls include, a linear/quadratic specification in age, controls for province/territory, and a detrended unemployment rate. Additional Characteristics of the PA controls include: Highest level of education, Knowledge of official language, Age of immigration, Gender, Marital status, Income at ages 10 to 17, and Came prior controls. Additional Personal Characteristics controls include: Cohort, YSM, Mother Tongue, Country/Region of birth and Taxfile year of first earnings controls. Sample, male and female arriving at ages 0 to 17 between the years of 1980 and 2004. Tax returns from 1987 to 2014, for when these individuals were 24 to 52. Sample restricted to those who had filed at least 10 tax returns.