Of Intake and Outcomes: Wage Trajectories of Immigrant Classes in Canada1

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Abstract

This study utilizes tabular data from the Canadian “Immigration Database” (IMDB) to look at the association between entry class and the wage earnings of immigrant cohorts arriving between 1990 and 2007. As expected, immigrants entering as skilled, principal applicants have the strongest earnings trajectories. Immigrants who enter under family or humanitarian considerations see more moderate earnings growth with government assisted having the shallowest earnings trajectories.

Introduction:

Canada’s immigration policy responds to three major drivers: the promotion of economic growth, the facilitation of family reunification and its humanitarian obligation with intake categories broadly matching the drivers. There are several entrance categories under which potential immigrants can apply to enter the country, the major ones being skilled workers, business immigrants, sponsored dependants of skilled dependents, family class and three types of refugees (state sponsored, privately sponsored and asylum).3 The first two categories are selected via a point system, which assigns scores based on level of education, work experience, skills relevant for work in preferred occupations and knowledge of a charter language. Primary applicants under the independent class must meet minimum human capital requirements. Immigrants with immediate family members already living in Canada need not meet specific skills or financial criteria, but they are required to have a sponsor (typically the family member) who has agreed to provide financial support for a period of three to ten years following arrival. Skilled workers require no such support, and only need demonstrate that they are able to provide for

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3 In 2015 the federal government implemented the Express Entry System for selecting skilled immigrants in which employers take a much stronger role in determining immigrant selection. Under this system, candidates who pass a human capital threshold enter a pool, of which the highest ranking are invited to apply for permanent residents. A job offer (supported by a ‘Labour Market Impact Assessment’) from a Canadian employer will generally push a candidate into the ‘invited’ category. (http://www.cic.gc.ca/english/express-entry/).
themselves and their dependents during the first six months of settlement. Government
sponsored and privately sponsored refugees are resettled in Canada through a series of
programs with a goal of providing refuge from persecution and integrating them readily
into the Canadian labour market. Asylum seekers apply for refugee status within Canada
and are assessed on criteria based on international standards.

While there is a great deal of research that assesses overall earnings differentials for
immigrants as a whole, studies that assess differentials by intake class are less common.
This is in large part because most datasets do not identify entry class as a distinct
variable. Thus, despite its policy importance, there is a dearth of information on the
association between entry class and immigrant labour market outcomes. This study
utilizes tabular data from the Canadian “Immigration Database” (IMDB) to look at the
association between entry class and the wage earnings of immigrant cohorts arriving
between 1990 and 2007. The IMDB combines administrative records from the
immigration landing form and taxation information creating a comprehensive source of
data on the labour market behaviour of the landed immigrant population in Canada
(Statistics Canada 2012, Vachon, 2007). It is thus well suited to examining relative labour
market performance of immigrants over time. We use these data to assess changes in
earnings as a combined result of factors related to the length of stay in the country,
demographic and human capital characteristics as well as those related to the economic
conditions prevailing at the landing and tax year where wage outcomes were reported.

Using tabular data from the Immigration Database (IMDB), we ask 2 central questions:

1. What is the general picture of earnings by intake class and sex of immigrants in
   Canada?
2. Do wage trajectories converge over time based on intake class and gender?

As expected, we find that immigrants entering as skilled, principal applicants have the
strongest earnings trajectories, despite starting at about the same level as other entry class
entrants. Male immigrants who enter under family or humanitarian considerations see
more moderate earnings growth with government assisted and asylum refugees having
the shallowest earnings trajectories. Amongst refugee categories, privately sponsored
refugees start off with higher earnings and maintain a higher trajectory over time. The
story is broadly similar for females.

Literature Review:

International research on economic outcomes by category of entry is uneven in part
because of limited data availability and variability of data collection across countries.
For example, national data registers in Scandinavia contain information on entry class,
while those in North America generally do not. However, research in Northern Europe
often focuses on refugee or dependent streams because these are the dominant non-EU
flows (see Husted et al 2000; Bevelander and Pendakur 2009; Rashid 2009 and Rooth
and Åslund 2006).
Husted et al (2000), for example, examine employment and wages of immigrants to Denmark paying particular attention to differences between refugees and non-refugees. They find that initial wages for refugees tend to be lower but if employed early, wages can rise to match those of native Danes. Bevelander and Pendakur (2009) point to clear differences in employment trajectories between government assisted refugees, landed refugees and family reunion immigrants in Sweden. They conclude that these differences are a product of integration policies that vary by entry category. Asylum refugees, for example, often have additional social resources and can settle where there are more job prospects. Also for Sweden, Rashid (2009) uses national level data to assess the impact of mobility on economic outcomes for government sponsored refugees and concludes that internal migration generates a positive outcome in terms of higher family income for newly arrived refugee families. This is in part because refugees are often moving from a place with few jobs to a city with greater employment opportunities.

For Australia, Chiswick et al (2005) use data from the Longitudinal Survey of Immigrants to Australia to assess earnings trajectories for 3 waves of immigrants by visa category. They find that independent immigrants have higher earnings and steeper trajectories compared to either family or refugee categories. Connor (2010) assessing economic outcomes in the United States also finds that refugees are subject to lower earnings than other categories of intake but that this difference can, at least partially be explained by differences in language ability, schooling, level of family support, mental health and residential area.

Turning to Canada, Abbott and Beach (2011) use tabular data from the IMDB to look at the relationship between admission category and macro-economic conditions for 3 immigrant entry cohorts (1982 1988 and 1994). They find that independent class immigrants have consistently higher median earnings as compared family or refugee class immigrants (see also McHale and Rogers 2008, 2009). Shields et al (2010a 2010b) assess labour market outcomes by class using a variety of data sources including the Ethnic Diversity Survey, the Survey of Labour and Income dynamics and the Workplace Employee Survey. They find stark differences by entry class with principal skilled applicants performing the best and refugees facing longer spells of joblessness and higher unemployment rates.

Much of the Canadian research on outcomes for refugees treats the group as a whole and concludes that earnings are low compared to other categories of entry (Aydemir, 2011; Hammerstedt and Mikkonen, 2007). Concomitantly, Devoretz, Pivnenko and Beiser (2004) using IMDB data find that refugees tend to do as well as family reunion immigrants in terms of earnings (see also Hiebert 2002). Aydemir (2011) uses the Longitudinal Survey of Immigrants to Canada to compare the labour force participation and earnings of different categories of immigrants 2 years after arrival. He concludes that refugees have lower participation rates as compared to family reunion immigrants but that earnings are about the same. Bevelander and Pendakur (2014) break out the refugee categories into asylum and resettled categories, comparing these groups to family reunion immigrants in Canada and Sweden. They conclude that male refugees (either government assisted or asylum) have lower earnings than family class immigrants but
that the employment rate for refugees was higher in Canada as compared to Sweden for both men and women.

Given that economic immigrants must meet human capital thresholds to qualify for entry it is expected that they should be more successful in the local labour market than family class immigrants or refugees (see, for example Wanner, 2003; De Silva, 1997; Jasso and Rozenzweig 1995; Wright and Maxim 1993). However, other categories of immigrants are not devoid of social and economic assets, which can aid in labour market success. Government sponsored refugees, for example have access to a broader basket of integration services including income support and housing assistance. Privately sponsored refugees and family reunion immigrants can access social capital networks through their sponsoring groups, which may assist in integrating into the broader society and finding a job. For example, Hiebert (2002), examining the situation in British Columbia, uses IMDB data to conclude that the language training provided to refugees results in better outcomes than family reunion immigrants. Indeed, he argues that the earnings gap between refugees and economic immigrants is actually smaller than would be expected because of this training (see also Hiebert 2009). In addition, members of the family class may rely on the support of their individual sponsors as well as the broader social networks generated by sponsors to achieve favourable employment and income outcomes (see Duleep and Regets 1996; Jasso and Rozenzweig 1995; Pythean, et al 2009). Thus, for the latter group, social capital, as manifest through family sponsorship, may compensate for potential shortages in human capital.

Research has also pointed to the importance of the business cycle in determining long-term economic outcomes. For example, Chiswick et al (1997), argue that while there is no evidence that immigrants who arrived in a recessionary period are subject to long-term “scarring” effects, they do appear to be more sensitive to cyclical changes in economic activity than is the case for the native-born. Other North American work points to downturns in the business cycle and high unemployment rates as having a harder and more lasting impact on immigrants as compared to native born workers (Chiswick and Miller 2002; Orrenius, and Zavodny 2009). Unskilled workers and recent immigrants are especially vulnerable: they are subject to a much higher risk of unemployment, and, costs to the welfare system are thus considerably larger (Mukoyama and Sahin 2006; McDonald and Worswick 1998; 1997).

Method:

The literature suggests that wage trajectory differentials among immigrant groups may be attributed to different factors including time in the host country, human capital stocks, and general economic conditions at entry (Aydemir 2011; Husted et al 2000; Wanner, 2003). In addition, country of origin can have an impact on earnings as immigrants can be subject to discrimination in the labour market (Pendakur and Pendakur 2015). Addressing our central research questions posited in the introduction, our interest lies in identifying the determinants of the starting points and rates of income growth by specific intake categories as well as region of birth. In addition, and drawing from Chiswick et al (2005) and others, we wish to better understand the impact of the business cycle on
outcomes for immigrants by intake class (see also Chiswick et al 1997; Orrenius and Zavodny 2009).

In this analysis we use tabular data drawn from the IMDB\(^4\) that includes information on immigrant categories in conjunction with information on age in tax year, sex, schooling at entry and selected places of birth. The table provides information for each year of entry from 1990 – 2007 and shows selected tax income for each year after arrival. In this table each row of information (or unit of analysis in this case) can be thought of as a separate year of entry-age-sex-schooling-entry category- place of birth cohort.\(^5\) We limit our analysis to immigrants who have been in Canada for more than 2 years and are 25 to 64 years old in the tax year. Immigrants from the United States are dropped, largely because there are no refugees born in the United States on the data set and they do not face the same challenges to integration as compared to immigrants from other regions. Live-in care givers and refugee dependents are also dropped from the analysis because counts are relatively low. Business class immigrants are dropped from this analysis largely because their incomes are more likely to be from non-employment sources.\(^6\)

Our working table contains information on the total number of immigrants who are employed by someone else and the mean employment income for every year after entry. Our dependent variable is the mean cohort employment income from wages and salaries for every year following the initial 2 years in the country.\(^7\) Our independent variables are:

**Intake category predictors:**

- 2 types of skilled migrants
  - principal applicants
  - dependents of the skilled applicant.
- Family class immigrants
- 3 types of refugees
  - government assisted
  - landed in Canada (asylum seeking)
  - private sponsored

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\(^4\) The Longitudinal Immigration Database (IMDB) links immigration and taxation records to create a comprehensive source of data on the economic behaviour of the immigrant tax-filer population in Canada. It is the only source of data that provides a direct link between the intake class of immigrants and economic performance over time. ([http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5057](http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5057)).

\(^5\) While it is possible to request more detail than is available in our IMDB table, Statistics Canada confidentiality rules and data rounding criteria means that more detail would result in smaller average cell sizes and more error due to Statistics Canada rounding procedures.

\(^6\) We note that the IMDB does not include information on people who are Canadian citizens by birth.

\(^7\) The dependent variable is actual earnings and has not been transformed into its log form. Transforming an average salary to a log value within a regression context is not possible because logging average incomes (as we have using these tables) leads to distortion of the log metric and its interpretation.
Breaking out the intake categories offers several advantages. In particular, as compared to Abbott and Beach (2011) we partition the refugee category into three specific subcategories rather than amalgamating them into a single category.

Length of stay predictors:
- Years after landing – 10: The dataset contains information on all immigrants landed between 1990 and 2007. We have chosen to estimate the earnings for immigrants 10 years after arrival to allow for a sufficient period of economic adaptation.
- Years after landing – 10²: allows us to capture nonlinearities, which may be present in the earnings trajectories.

Socio-demographic predictors:
- Age in tax year: 4 categories (25-34 (the comparison group), 35-44, 45-54, and 55-64)
- Region of Birth: 5 categories (Middle East (the comparison group), Africa, Asia Pacific, Europe and UK, and South and Central America).
- Level of Schooling: 5 categories (none, high school or less, post secondary certificate, Bachelors degree (the comparison group), and, graduate degree)

Contextual predictors:
- Using unemployment rates as proxies for economic conditions Chiswick et al (1997) Chiswick and Miller (2002) argue that downturns in the business cycle do not have a permanent impact on earnings trajectories. For this reason we include 3 measures of the national unemployment rate:
  - 1 year before entry,
  - at entry
  - 1 year after entry

Our methodological approach involves running three series of analytically weighted linear regressions having the general functional form:

$$ Y(\text{predicted}) = f(\text{intake class}, \text{length of stay}, \text{sociodemographic}, \text{unemployment rate}) $$

where:
- $Y(\text{predicted})$ = annual earnings from wages and salaries

The first is a general model assessing the impact of variables related to length of time in Canada, socio-economic characteristics, entry class and contextual economic characteristics for males and females separately. The second regression equation has a

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8 We also tested our models with cubic and quartic forms of the length of stay. However, the impact of these terms was negligible, largely insignificant and did not contribute to the explanatory power of the model.

9 The national unemployment rate is used because the tabular data did not allow for regional breakdowns. Adding provincial/territorial unemployment rates would increase the table size by thirteen times and concomitantly reduce cell frequency counts by the same magnitude.
goal of producing a series of earnings trajectories by intake category, controlling for selected predictors. In these regressions we interact the years in Canada (both the linear and quadratic term) with the category of entry. The results are then graphed to assess the change in earnings over time. The third regression set is a series of 12 analytically weighted regressions (6 intake categories for males and females separately) with the same set of controls as in the first model.

Our final sample is comprised of immigrants entering Canada from 1990 to 2007 with tax information beginning two years after entry (1992 to 2009). In all cases, in order to be included in the analysis, the minimum cell count of taxfilers is set to 10 and the minimum annual income from wages and salaries is set to $100. We are thus left with 101,817 cohorts representing 10,369,955 observations over a 17-year period. It should be noted that our data do not include information on the geographical area of settlement and for this reason we cannot assess the impact of local labour markets.

Findings:

Table 1 provides information on the average cohort earnings from wages and salaries as well as the number of person-tax years represented by intake class and gender. As discussed, the unit of analyses is age-sex-education-birthplace-landing year-tax year cohorts implying that individuals can be represented more than once within any given frequency count. In total there are approximately 16.9 million person-years represented in the dataset with an average income from wages and salaries of about 22 thousand dollars for females and 36 thousand dollars for males.

Forty-three percent of the person-tax year females are in the family class, while amongst males, 42% are principal skilled applicants. Amongst males, skilled principal applicants have the highest incomes ($44,414). Similarly, amongst females, skilled principal applicants also have the highest incomes ($31,769). Looking at refugees, privately sponsored refugees have the highest employment incomes ($21,015 for women and $31,228 for men).

As can be seen from the description of sample characteristics, describing wage and sample data for cohorts of person-tax years is cumbersome using tabular methods. Adding variables of interest, such as age or level of schooling, while enhancing the findings also massively increases the complexity of the description. For this reason, we turn to regression methods to summarize changes in earnings after controlling for both individual and contextual attributes.

Table 2 shows results from two weighted OLS regressions (females and males) in which the dependent variable is earnings from wages and salaries predicted by time in Canada, individual and contextual characteristics. These variables explain about 82% of the variance (r² value) in female wages and 78 % of the variance in male wages.10 The

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10 It should be noted that performing regressions on tabular (aggregate) data results in smaller than normal standard errors and inflated r² values (Moulton 1990). This is because the regressions
constant for these equations should be understood as the expected earnings for a skilled principle applicant from the Middle East, 10 years after arrival with a bachelor’s degree, 25-34 years old.

The table can be thought of as divided into 3 parts: entry category, personal characteristics (years in Canada, age, education and region of origin) and contextual (entry period) characteristics (the unemployment rate before landing, at landing and after landing). Turning first to Entry category, we see that it makes a difference in earnings. Skilled Principal Applicants (the comparison category) earn substantially more than those entering under other categories. Amongst women, those who enter in other categories earn between $6,744 and $11,047 less than Skilled PAs. Government assisted and privately sponsored refugees show the lowest average earnings ($-11,047 and $-10,371 less than Skilled PAs respectively). Amongst men, the differentials are somewhat higher, ranging from $-7,379 to $-14,555. Male refugees fare very poorly even after controlling for personal and contextual characteristics. Government assisted refugees earn $14, 555 less, privately sponsored refugees earn $12,434 less and Asylum refugees earn $10,802 less than Skilled Principal Applicants.

Looking at personal characteristics independent variables, we see that the linear impact of years after landing has a strong impact on average employment earnings. Ten years after landing, earnings for males are predicted to increase by $2,176 per year and for females $1,638 per year.

Compared to the youngest cohort (age 25-34), older immigrants perform poorly. Amongst women, cohorts age 45-54 earn $874 less and cohorts age 55 to 64 earn $5,175 less. Amongst men the pattern is broadly similar, but those age 35-44 earn somewhat more than the youngest cohort ($747 more) while older cohorts earn less ($1,467 less for cohorts age 45-54 and $7,492 less for cohorts age 55-64). As is to be expected, schooling makes a difference with people holding university degrees earning substantially more than those with lower levels of schooling.

Turning to source region, we see that amongst women, all source regions have higher earnings than those from the Middle East, with those from Europe doing the best ($4,509 more). Amongst men, those from the Asia Pacific region on average earn $1,526 less compared to Middle Eastern immigrants, while those from Europe earn $10,304 more.

Contextual characteristics are also important. The unemployment rate 1 year after arrival has the strongest impact on earnings. Every 1 percent increase in the unemployment rate after the year of arrival decreases immigrant earnings by $1,310 for women and $2,545 for men.

Earnings trajectories:

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explain variation between group means, with groups defined by the cell characteristics as compared to variation between individuals.
Figures 1 and 2 show estimated earnings trajectories based on a model in which we interact the intake class with years in Canada and its quadratic term.\textsuperscript{11} Looking first at Figure 1 (females) we see that category makes a difference in the earnings trajectories. As expected, skilled principal applicants start at a higher level (above 20 thousand per year) and end with higher earnings (64 thousand at the end of the observation period). Skilled dependents start at a lower level, but experience rapid increases in earning, albeit not as high as principal applicants (59 thousand at the end of the observation period).

Immigrants entering as refugees have low earnings and shallower trajectories than other groups. However, there are differences within the refugee categories. Government assisted refugees start with the lowest earnings and end with the lowest earnings (below 13 thousand at the beginning of the period and 41 thousand at the end of the period) Asylum and privately sponsored refugees have higher initial wages that continue across the observation period with PSRs having the highest wages at the end of the period (45 thousand for PSRs as compared to 43 thousand for Asylum refugees).

Turning to males (figure 2) we see three patterns. Skilled principal applicants fare the best, with the steepest trajectories in the initial years and with earnings of about $79 thousand after 19 years. Amongst refugees, Asylum refugees stand out as having high initial earnings but relatively shallow trajectories (initial earnings of 30 thousand and earnings of 62 thousand at the end of the period). Privately sponsored refugees have a much lower starting point on average (26 thousand) but catch up over time (62 thousand at the end of the period). Government assisted refugees start with low earnings and face shallow trajectories, resulting in low ending wages. Family class males track a middle path, well below skilled intake categories, but above the humanitarian classes.

Results by Intake Class

Building on results from the general model presented in Table 2, we run 12 OLS regressions (2 genders by 6 intake classes) with the same predictors.\textsuperscript{12} Partial regression results from these regressions are presented in Table 3.

Results for women:

Looking at results in Table 3, we see that, years in Canada is most important for skilled principal applicant women ($2,134 per year) but has the smallest impact for asylum refugee women ($1,444 per year). In comparison to immigrants from the Middle East, being from Europe has the greatest advantage within family, government assisted and privately sponsored refugee categories ($5,712 and above). Being from Europe has the smallest advantage in the independent classes.

\textsuperscript{11} We estimate earnings for individuals 25-34 years old, from the Middle East with Highschool education.

\textsuperscript{12} Table 3 provides selected coefficients for the 14 regressions. Age related variables are included in the model, but not presented in the table.
Being from the Asia Pacific region generally has little impact compared to being from the Middle East, except for the case family class women (-$2,159). The unemployment rate 1 year after arrival has a very strong negative impact for all categories (ranging from -$988 for family class immigrants to -$2,901 for privately sponsored refugees).

Results for males:

Turning to males, years-in-Canada is positive for all categories, but largest for the skilled categories and privately sponsored refugees ($2,782 for skilled principal applicants and $2,018 for PS refugees). Once again we see a European advantage, but it is much stronger for male skilled applicants than was the case for women. Skilled principal applicants from Europe earn $12,264 on average more than those from the Middle East. Within the family class, men from Europe earn $10,846 more and within the government assisted refugee class they earn $11,611 more. The European advantage is much smaller in the skilled – dependent class ($3,270). The unemployment rate one year after landing has a strong impact across all categories, but is particularly severe for privately sponsored refugees (-$4,016 for every 1 percentage point increase).

Conclusions:

Research assessing the link between immigration category and economic outcomes is somewhat sparse, but politically important in settler societies such as Canada. In this study, we have attempted to bridge some of the knowledge gaps using tabular data, which looks at earnings over time for different age-education-world region-immigrant category cohorts.

Reflecting on our research questions, if intake category was irrelevant to predicting economic outcomes, then, given the same human capital, all immigrants should have about the same income trajectories. We are not seeing this. Immigrants selected under the point system far outperform other categories including their spouses and dependants. This is not particularly surprising – we expect them to do well. Male immigrants who enter under family or humanitarian considerations see more moderate earning growth. The story is broadly similar for females. What is surprising are the differences in outcomes across refugee categories. Across both men and women, privately sponsored refugees show relatively strong earnings outcomes, government assisted refugees have much shallower trajectories. The fact that privately sponsored refugees do so well may be attributable to the substantial social capital and the related informal integration networks built through the sponsoring agency or group. Indeed, the outcomes for PSRs are much better than is the case for government-assisted refugees who have access to a broader spectrum of government assistance.

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13 It is possible that future investments in human capital differ by intake class, which could impact earnings trajectories. If, for example, skilled principal applicants have, on average, more education on entry, and accumulate additional schooling after entry, their earnings will start at a higher level and the trajectories will be steeper. Our data do not allow us to explore this possibility.
Gender is a strong determinant of outcomes for family class immigrants. Family class males do well, suggesting that the support offered by the sponsoring party is quite helpful. Family class women do not perform well in the labour market, which could be indicative of a lower degree of attachment to the labour force. These findings are in line with Shields et al (2010a and 2010b) but suggest that the impacts are longer lasting.

As is to be expected, time in Canada plays an important role in wage outcomes for all intake classes, but has the greatest impact for Skilled (both the principal and dependants) and Government Assisted refugees. Following the literature on discrimination, region of birth remains a strong determinant of earnings (Li, 2004; Pendakur and Pendakur 1998, 2014; Wanner 2003). Immigrants from European countries have much better wage prospects as compared to those from other regions particularly among females. As expected, higher levels of human capital in the form of education are rewarded across all entry classes. Indeed family class males with a graduate degree see an average payoff of $10 thousand over a bachelor’s degree.

Confirming previous research our analysis indicates that the impact of the business cycle (as measured by unemployment rates) on wage growth hits intake classes differentially (see Abbott and Beach 2011 Chiswick et al 2005, 1997). In addition, we find substantive differences even within intake subcategories. Privately sponsored refugees, family and skilled principal applicants are most affected by high unemployment rates one year after entry, while other groups of refugees and skilled dependent immigrants are less impacted by low unemployment rates.

From a policy perspective these findings are heartening. The selection process appears to work – immigrants selected under the points system have the most promising earnings trajectories of any category. However, only about one sixth of immigrants have entered under this category over the last decade. This is not to say that other classes do not experience upward income mobility, but it is somewhat muted in comparison. Even the dependents of selected immigrants have substantially shallower earnings trajectories. Of concern is the fact that our humanitarian efforts also seem hampered. Government assisted refugees appear to struggle in terms of their earnings mobility to a greater extent than other groups. Finally, family class men do surprisingly well over the long-term suggesting that sponsorship is a valid and valuable mechanism for immigrant integration.
References:


Housing and Economic Experiences of Immigrants in North American Cities, Toronto: University of Toronto Press.


**Figure 1: Wage trajectories by intake class, females**

- Skilled principal
- Skilled dependant
- Family
- Govt assisted refugee
- Privately sponsored refugee
- Asylum refugee

**Figure 2: Wage trajectories by intake class, males**

- Skilled principal
- Skilled dependant
- Family
- Govt assisted refugee
- Privately sponsored refugee
- Asylum refugee
Table 1  Average employment earnings and number of observations (cohorts * persons) by intake category and sex

<table>
<thead>
<tr>
<th>Category</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>average</td>
<td>average</td>
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<tr>
<td></td>
<td>employment</td>
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<tr>
<td></td>
<td>income ($)</td>
<td>income ($)</td>
</tr>
<tr>
<td></td>
<td>observations</td>
<td>observations</td>
</tr>
<tr>
<td></td>
<td>person years</td>
<td>person years</td>
</tr>
<tr>
<td>Selected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled - principal applicant</td>
<td>31,769</td>
<td>44,414</td>
</tr>
<tr>
<td>Skilled - spouse/dependent</td>
<td>23,577</td>
<td>34,237</td>
</tr>
<tr>
<td>Family</td>
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</tr>
<tr>
<td></td>
<td>18,657</td>
<td>29,584</td>
</tr>
<tr>
<td></td>
<td>3,753,265</td>
<td>2,455,715</td>
</tr>
<tr>
<td>Refugee</td>
<td></td>
<td></td>
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<tr>
<td>Govt assisted</td>
<td>18,452</td>
<td>26,175</td>
</tr>
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<td>Asylum</td>
<td>18,434</td>
<td>25,617</td>
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<tr>
<td>Privately sponsored</td>
<td>21,015</td>
<td>31,228</td>
</tr>
<tr>
<td>Total</td>
<td>22,163</td>
<td>35,797</td>
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<td></td>
<td>8,689,765</td>
<td>8,260,905</td>
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</table>
Table 2: Results from 2 OLS regressions assessing average wages by selected individual and contextual characteristics

<table>
<thead>
<tr>
<th>Category (Skilled PA)</th>
<th>Female coef.</th>
<th>s.e.</th>
<th>sig.</th>
<th>male coef.</th>
<th>s.e.</th>
<th>sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled - Sponsored</td>
<td>-6,744</td>
<td>117.0***</td>
<td>-7,630</td>
<td>149.0***</td>
<td></td>
<td></td>
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<tr>
<td>Family</td>
<td>-9,094</td>
<td>107.3***</td>
<td>-7,379</td>
<td>136.1***</td>
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</tr>
<tr>
<td>Govt Assisted</td>
<td>-11,047</td>
<td>127.3***</td>
<td>-14,555</td>
<td>155.7***</td>
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<td></td>
</tr>
<tr>
<td>Asylum</td>
<td>-8,986</td>
<td>118.5***</td>
<td>-10,802</td>
<td>172.4***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privately Sponsored</td>
<td>-10,371</td>
<td>139.4***</td>
<td>-12,434</td>
<td>179.8***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year in Canada</td>
<td>1,638</td>
<td>14.4***</td>
<td>2,176</td>
<td>19.0***</td>
<td></td>
<td></td>
</tr>
<tr>
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Note: comparison variable in parentheses
regressions are analytically weighted by cell frequency size
significance: *: 0.10; **: 0.05; ***: 0.01
## Table 3: Partial results from 14 regressions assessing earnings

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**Note:**
- comparison variable in parentheses
- regressions are analytically weighted by cell frequency size
- significance: *: 0.10; **: 0.05; ***: 0.01