

**Immigrants and union membership:
factors influencing membership and its impact
on immigrant labour market outcomes**

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EXECUTIVE SUMMARY

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Title: Immigrants and union membership: factors
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Objectives

This paper looks at union coverage differences between Canadian-born and landed immigrants and whether these differences are reflected in labour market outcome, specifically differences in earnings and job tenure.

Data sources

Labour Force Survey, 2008

Analytical techniques

Descriptive statistics/cross-tabulations were used to estimate rates of union coverage and wage differences for employees with union coverage using various demographic and labour market characteristics. Logistic regressions were used to estimate the impact of these characteristics on coverage, log wage and log tenure models were used to estimate the impact on earnings and job tenure.

Main results

There is a significant difference in coverage rate between Canadian-born and landed immigrants, as well as between landed immigrants from European and non-European countries of origin. There has been a sharp decline in union coverage rates for immigrants over the last 30 years that cannot be fully explained by the declining general union coverage rate in Canada over the same period. This difference closes with length of time spent in Canada. There are marked differences in distribution and union coverage rates when looking at industry and occupation classification as well as geographic location. These gaps in coverage are reflected in the generally lower wage and tenure outcomes for Canadian immigrants. In much the same way as coverage, these gaps likewise close with time spent in Canada indicating an acculturation/assimilation/learning effect.

Keywords

immigrant, Canadian-born, European, non-European, labour market, assimilation, integration, union coverage, unionisation, unionisation, benefits, earnings, tenure

INTRODUCTION

Since the early 1980's, immigrants to Canada have faced increasing difficulty in the labour market (Picot et al. 2007), possibly resulting from changes to Canadian immigration policy in the late 1960's and through the 1970's (Bloom et al. 1994). Yet at the same time, immigrants have accounted for an increasing proportion of the Canadian labour market as the population ages and low fertility rates persist. As Don Drummond noted in 2008, "Virtually all of Ontario's net labour force growth between now and 2020 will come from immigrants."¹

It has also been noted that since the early 1980's the rates of union coverage for Canadian workers have declined considerably (Morissette et al. 2005). Union membership can offer a wage premium (Fang, Verma 2002) and entails certain fringe benefits such as health, disability and life insurance, as well employer-sponsored pension plans and longer job tenure (Akyeampong 2002).

Unionisation rates among low paid jobs have been found to be a fraction of those for high paid jobs (Morissette, Picot 2005). It has also been noted that new immigrants' labour market entry often involves low-paid employment at the outset (LSIC, 2005) and that job-skill matching into higher wage employment occurs over time.

In light of this research, the link between union coverage and Canadian immigrants' labour market outcomes has been explored. It has been noted that there are relatively

¹ Drummond, D. (2008) "Time for a vision of Ontario's Economy: Much of the Foundation of Past Economic Success Has Crumbled." TD Economics Special Report TD Bank Financial Group, Sept 29, 2008, p11

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fewer immigrants in the union ranks in Canada (Fang, Verma 2002). The questions relating to the union coverage of immigrants and if unions have an impact on the integration of new immigrants, particularly those of non-European origin, into the labour market have been explored (Reitz, Verma 2004), but with data sets from a smaller survey, which limited analysis of industry or occupation and other factors at lower levels of disaggregation.

LITERATURE REVIEW

Bloom et al. (1995) looks at the labour market assimilation of immigrants to Canada. The data source is the Census for years 1971, 1981 and 1986. As an empirical study, their paper uses the change in income over time as a measure of assimilation, controlling for various socio-demographic factors. The model used is a Chiswick (1978) immigrant earnings model, adjusted for immigrant effects as defined by Borjas (1985).

The two notable trends discussed relate to the changing composition of Canadian immigrants. Significant is the discussion in the paper regarding key periods related to immigration policy in Canada. The point system, introduced in 1967, and the increased focus on humanitarian aspects of immigration policy as they relate to refugees, beginning in the 1970's, are noted. It is asserted that these two events led to a decline of immigrants entering under the skilled worker category who had relatives already living in Canada. The lower emphasis on immigrants with family already residing in the country may have contributed to increased difficulty with assimilation and labour market

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integration for immigrants entering Canada after this period. It is also argued that these policy events changed the country of origin composition of immigrants to Canada from Western industrialised countries such as Europe and the United States to developing countries (Bloom Gunderson 1991, Borjas 1988, Wright Maxim 1993). Their findings are that immigrants start at a wage disadvantage, that there is convergence over time, and that convergence varies by gender, country of origin, year of migration and other factors. For male immigrants from Asia, Africa and Latin America in early 1980's, that period of convergence, referred to as years to equality, was found to be longer than the average working life span. This was most likely due to the recession prevalent in Canada at the time, indicating that negative labour market outcomes for immigrants arriving during such periods are magnified.

Aydemir and Skuterud (2005) uses Bloom et al. (2005) as a starting point, updating with more recent Census years 1991, 1996 and 2001. It updates the analysis by aggregating immigrant source countries into two groups, Western and Eastern. Their definition of Western excludes Eastern Europe. They sometimes interchange Western and Eastern with 'traditional' and 'non-traditional' source countries.

The notable trends are the impact of foreign experience and foreign education, indicating that more recent Eastern cohorts had lower returns to both than their Western counterparts. Source country, experience and education are found to account for roughly two thirds of the deteriorating conditions of more recent cohorts, whereas labour

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market entry conditions are found to account for the remainder of the decline for recent immigrants of the 1990s relative to those from the 1960s.

Fang and Verma (2002) explore the benefit of union coverage as measured by the premium wage earned by those with coverage over those without coverage. The data source is the Workplace and Employee Survey (WES) for 1999. This is an empirical study looking at the difference in wages based on union coverage controlling for certain socio-demographic and labour market characteristics. The model used is a wage difference model based on a wage function controlling for labour supply as well as labour market characteristics. Although the paper discusses the changes in the wage premium over time starting in the 1980's as constructed from five different surveys covering the period of 1984 to 1999, the analysis is cross-sectional, based on the 1999 data from WES.

The trends noted are the declining gap in the union wage premium from the early 1980's to the end of the 1990's. Among the findings related to personal and job characteristics, mention is made of not only a wage premium for individuals with coverage, but also significantly higher job tenure. Note is made of the under-representation of immigrants among those with union coverage. With regard to workplace characteristics, differences were notable by industry, firm size and province of residence. Of special interest is the note about the lower coverage in Alberta and Ontario, the latter being the destination of the majority of immigrants to Canada.

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Akyeampong (2004) looks at the trends of union coverage over time. It uses historical profiles from the Corporations and Labour Unions Returns Act (CALURA) for the years 1977 to 1987 as well as the Labour Force Survey (LFS) for the years 1997 to 2003.

The primary focus is on short-term gains and losses, specifically between the two-year 1997 and 2003 from the LFS.

Of note are the demographic shifts based on gender and age, a link between the shift in gender and the shift in industry coverage, the link between industry coverage and the compositional change of industries in the economy, as well as occupation, job status, workplace size and province.

Morissette et al. (2005) also explores the historical trends in compositional change of union coverage. The years examined are 1981 and 2004. It uses several different survey data sets, including the Survey of Work History (SWH) for 1981, the Labour Market Activity Survey (LMAS) for 1986 and 1989, and the LFS for years 1998, 2001 and 2004. Historical profiles are used to highlight compositional changes over the period covered.

Noted are the differences between men and women between 1981 and 2004, during which coverage for men declined by 12% as coverage for women declined by less than 1%. Younger workers had sharper declines than older workers, and this was most pronounced for men under the age of 35. Coverage rates fell in all provinces. The declining coverage rates for men were half attributable to compositional changes in

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industry of occupation. Other factors such as tenure, hours of work and education were explored. Also noted are the differences in effects between industries, specifically what are broadly labelled as public services, where union coverage remained steady over time, and what are labelled good producing and distributing services, which declined over the same period.

Union Coverage rates in Canada

	1981	1986	1989	1998	2001	2004	1981-2004
Canada	37.6%	36.0%	35.9%	30.7%	30.2%	30.6%	-7.0%

Table 1, Morissette, Schellenberg, Johnson (2005), p 6

Akyeampong (2002) looks at the impact of union coverage on non-wage benefits, specifically, medical, dental, life-disability insurance and pension benefits. The data source is the Survey of Labour and Income Dynamics (SLID) for 1999. Cross-sectional analysis with descriptive tables to highlight differences generally as well as differences controlling for firm size and industry sector are used.

It is noted that workers with union coverage are twice as likely as their counterparts without coverage to have benefits. All employees' benefits coverage increased with firm size. Non-unionised employees in smaller firms had the lowest incidence of benefits coverage. Public sector employees generally had higher benefits coverage.

Although benefit coverage is not asked on the LFS, this research indicates that there are non-wage/tenure benefits that can accrue to immigrants. Whether such benefits are as available to immigrants as they are for the Canadian-born can have long-term policy implications. There has been research into the declining health outcomes of immigrants

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in the years following initial landing (LSIC, 2005), and access to health benefits accruing from union coverage can be a factor in such outcomes.

Reitz and Verma (2004) look at the effect of race on union membership as well as the impact of the interaction on wages. The data source is the Survey of Labour and Income Dynamics (SLID) for the year 1997, waves 1 and 2. The sample comprises adults in the workforce, excluding the self-employed and farmers. This is an empirical review, using a logistic regression controlling for various socio-demographic and workplace characteristics in the first instance to measure the likelihood of visible minorities having union coverage, and a log wages model in the second instance to explore the impact of coverage for visible minorities on their earnings.

This paper uses a Canadian study (Christofides and Swidinsky 1994) which found visible minority males just two-thirds as likely to be union members as non visible minority males as a launching point.

The authors note some of the outstanding limitations of their study as a result of using SLID, namely that sample size from SLID does not allow for disaggregation by industry and occupation. The sample size issue also renders some lower significance results for other variables in the study.

DATA SOURCES AND METHODS

Data Sources

It is only recently, January 2006, that the LFS started asking questions related to immigration. With the advantage of a large sample size, current data and the newly added questions, the proceeding will use the LFS 2008 master file data as the primary data source.

Several variables will be used to account for the difference in rates of union coverage in Canada, some related to the structure of the labour market and others related to the labour supply. Variables related to the labour market structure include occupation class, industry class, firm size and regional variation (aggregated provinces, except for Ontario and Québec). Variables related to the labour supply include years/months since migration (proxy for social integration), education level, country where highest level of education was completed, country of origin (aggregated by region), age (aggregated age groups) and gender. Other variables that relate to both broad variable groups include permanent/temporary and full-time/part-time status. Variables with more than four discrete responses are aggregated to varying degrees, as described in the proceeding.

Methodology

Descriptive statistics, logistic and linear regressions using cross-sectional data from the Labour Force Survey (LFS) will be used. Since, the LFS only began asking questions

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on immigration three years ago, the options for time-series analysis are limited. This paper will be limited to cross-sectional analysis using LFS data from 2008.

The focus will be on Canadians age 17 to 64, who are employed. Where required, the difference between all those employed, those exclusively employed by the public/private sector, the self-employed and those in managerial occupations (NOC-S 2001 A) will be highlighted.

Analysis of union coverage is sometimes restricted to those in the population aged 25 to 54, presumably to exclude those who may only be working part-time and primarily pursuing secondary/post-secondary studies. However, certain lower-paying occupations tend to have an over-representation of older and younger workers excluded from this age group. As previously noted, new immigrants tend to be over-represented in lower-paying jobs, and immigrants on average are younger. Such exclusion would bias the results by under-representing immigrants in lower-paying occupations. An upper age limit of 64 would take into account the standard retirement age in Canada.

Another restriction often used excludes those who are self-employed. The LFS excludes the self-employed from being asked about their union coverage, as well as wages and tenure. This makes sense in that the self-employed are unlikely to be unionised. However, this assumption does not take into account whether those who are self-employed are so by choice. Also, the benefits of union coverage can accrue to those who are self-employed but working under contracts with employers providing

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wages and benefits commensurate with those provided to their employees based on collective agreements. Previous work has noted that immigrants are generally more likely to be self-employed than the Canadian-born (Li 1997) and that their incidence of self-employment increases over time (Frenette 2002). This is consistent with the LFS results, which indicate that immigrants to Canada from twenty years ago or more were significantly more likely to be self-employed than the Canadian born.

The data set consists of the combined June and December 2008 Labour Force Survey results. While using the summer and winter months may include seasonal employment, these would be for different seasons. The purpose is to look at union coverage, and including as many individuals and occupations, controlling for permanent/temporary and full-time/part-time status, seems more apropos than attempting to exclude all seasonal employees. A quick test running the sample data set for April and October, commonly used to attempt to exclude seasonal employment effects, indicated less than 2% difference in the number of employees 17-64 in non-management occupations used as the main sample in the proceeding. The two-month method was used instead of yearly averaging as respondent households in the LFS are retained for 6-months, with one sixth of households rotating out monthly. As such, 'annualising' the data by means of averaging can lead to individuals who happened to enter the survey within the first six months of the year biasing the result, since when these households are contacted each month following their first, they have their responses carried over into the following months unless they indicate that their employment status has changed, creating a quasi-cohort effect. The method used does

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not suffer from this effect.² The sampling method leads to a sample size of 95,642 respondents between the ages of 17 and 64 who are employees in non-management occupations.

A final note on the results: the tables and regression results presented use weighted data. The regression results were initially run unweighted to properly assess significance, and dummy variable selection and grouping was determined using this method.

ANALYSIS

Self-employment and coverage among immigrants

A common feature of the research into union coverage is the exclusion of individuals who are self-employed or who are in management occupations. The latter exclusion is due to the fact that those in management occupations are generally not unionised. Usually such research looks at differences in labour market outcomes for individuals based on coverage rates. Since those in management occupations tend to receive significantly higher compensation as compared to employees, in addition to not being unionised, including them in the universe would detract from the analysis.

The exclusion of the self-employed is not as readily apparent. Two separate rationalisations for self-employment exist. On the one hand, many of those who are self-employed decide to become so after having acquired the material and/or human

² Thanks to Georgia Roberts of Statistics Canada Social Survey Methods for the explanation on stratification, clustering and rotations used in the LFS

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capital to undertake such an enterprise. On the other, self-employment is often the only means of employment for those who are facing barriers to labour market entry or advancement. The spike in self-employment during the recession of the early 1990s as well, as the recent (April 2009) spike after six months of employment declines, would support the latter. This second point is especially significant when looking at the labour market outcome of immigrants. It should be noted that the LFS does not ask the reason for self-employment, as it does for part-time status. The stereotypical new immigrant job, taxi driver, helps to illustrate the issue with excluding the self-employed: the vast majority of immigrants in this occupation are classified as self-employed (Table 2).

Distribution and Coverage, Taxi Driver by Class of Worker

Immigrant status	Public or private employee		Self-employed	All
	Covered	Not covered	Not covered	
Canadian-born	5%	16%	17%	38%
Landed immigrant	2%	14%	47%	62%
All	7%	29%	64%	100%

Canadians age 17-64, employed
Table 2

Taxi drivers make up approximately 0.1% of all employed individuals in the population. The overall percentage of those who are self-employed composes a small, but significant percentage of the employed (Table 3).

Table 3

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Distribution, Occupation by Class of Worker by YSM

Immigrant status	Public/private employee		Self-employed		All		
	Management	Other	Management	Other	Management	Self-employed	Other
Canadian-born	7%	79%	3%	12%	9%	14%	77%
All immigrants	5%	78%	4%	13%	9%	17%	74%
00-05 years ago	4%	86%	2%	8%	6%	11%	83%
06-10 years ago	5%	81%	3%	11%	8%	14%	77%
11-20 years ago	5%	79%	4%	13%	9%	17%	75%
21-30 years ago	6%	76%	5%	13%	11%	18%	71%
31-plus years ago	8%	69%	5%	18%	13%	23%	64%
All	6%	79%	3%	12%	9%	15%	76%

Canadians age 17-64, employed

It would appear that the proportion of immigrants entering management positions corresponds to the proportion pursuing self-employment as the years since migration (YSM) increase, lending support to the human/material capital argument. Also, the proportion of all immigrants in Management occupations as well as Self-employed relative to the Canadian-born is similar. While the distribution among occupations may differ, as illustrated in Table 3, the relative proportion of the total labour market and the similarity of distribution between Immigrants and the Canadian-born should suffice to proceed with the analysis excluding the Self-employed and those in Management occupations.

Country/Region of migration over time

As noted, the pattern of migration to Canada has changed significantly over the last 30 years (Bloom et al. 1994). The majority of immigrants to Canada originate from Europe and Asia. The ratio has completely reversed itself over the last 30 years (Table 4).

Table 4

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Country/Region of origin by YSM

Immigrant status	Asia	Europe	Other	All
00-30 years ago	39%	17%	20%	76%
31-plus years ago	5%	13%	6%	24%
All	44%	31%	26%	100%

Canadians age 17-64, employed

While the proportion of those migrating from Asia and Europe has reversed itself over the last 30 years, nearly 2 to 1 from 1 to 2.5, the overall proportion of those from Europe has declined during that time as a significant number of those who arrived over 30 years ago have since either pursued self-employment, retired, return/onward migrated or died.

The proportion who remained in the workforce in 2008, 13%, are more likely to have union coverage as a result of the trend in unionisation over the last 30 years in Canada (Morissette et al. 2005), as well as the stronger labour movement in Europe relative to Asia (Reitz, Verma 2004). As such, the analysis of the factors that affect union coverage as well as the labour market impacts will have to take into account not only the different regions of origin, but also the year of migration, by proxy the YSM.

For convenience, the different continents/regions are grouped in two for the remainder of the analysis: one containing immigrants from North American (the United States), Europe and Oceania (mostly Australia), the other containing immigrants from Latin America (which includes Mexico), Africa and Asian. Socio-demographic variables such as visible minority status, social, cultural and linguistic abilities are not collected on the LFS, so these broad groupings can be seen as a rough distinction between what are commonly referred to as 'Western' countries and the rest of the world. The major

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immigrant contributing regions in each of the groupings are Europe and Asia, which collectively account for three quarters of all immigrants to Canada, as noted in Table 4. For brevity, these groups will be referenced as European and non-European from hereon. This differs from the Eastern/Western distinction in Aydemir, Skuterud (2005) only in that the European group includes Eastern Europe.

Chart 1 looks at the distribution of the population in the sample. The distribution of all immigrants from the two regions is presented along with the contribution to the total from each region in each year grouping. As expected, the European and non-European groupings closely match the distribution for Asia and Europe.

From Chart 2, several of the trends emerge. First, the coverage rate for all immigrants arriving over 30 years ago is significantly higher than those for all immigrants, and comparable to the rate of the Canadian born. Part of the story is accumulated knowledge of the labour market as well as human capital development over time spent in Canada. However, the labour market knowledge and human capital development differences between immigrants landing 11 to 20 years and those landing over 30 years ago cannot entirely account for a 50% higher coverage rate for the latter. It should be noted that the coverage rate for those in the European group and non-European group are not only both high for those arriving over 30 years ago, but that they are not that far apart (10% higher for the European group), supporting the findings in the literature that union coverage rates for all Canadians was generally higher over 30 years ago.

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Chart1

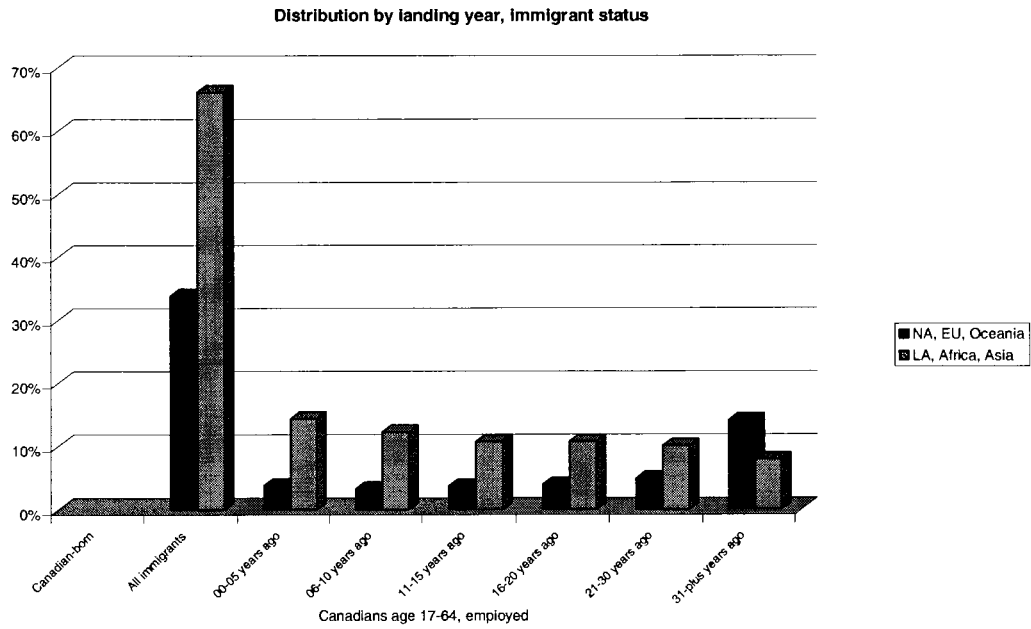
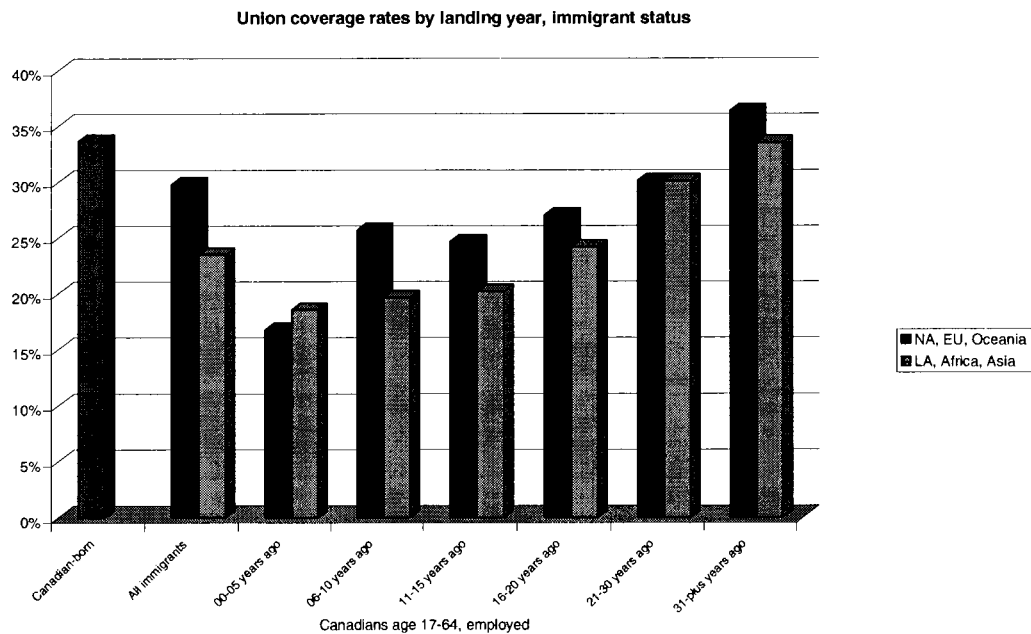


Chart2



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By contrast, when looking at immigrants landing 06-10 and 11-16 years ago, the coverage gap between European and non-European is widening at the same time that the overall coverage rate is decreasing.

The overall unionisation rate for immigrants has decreased over time as the proportion of immigrants with higher union coverage, the European group, has decreased and the proportion of the immigrants with lower union coverage, the non-European group, has increased over the same period as a proportion of all immigrants employed in non-managerial occupations in 2008.

Of note is the change over the last 30 years for Canadian immigrants. For those of European origin, the coverage rate goes from 17% for those arriving 5 to 10 years ago, up dramatically for those arriving 6-10 years ago to 26% then proceeding gradually to 30% for those arriving 21-30 years ago. For those of non-European origin arriving 5-10 years ago, the coverage rate is 19%, proceeding more evenly over time to 30% for those arriving 21-30 years ago. Both of these coverage rate shifts are significantly greater than the rate of change indicated in Morissette et al. (2005), where the coverage rate for all Canadians was 30.6% in 2004 and 37.6% in 1981. This would appear to indicate that there is more to the decline in union coverage rates for immigrants than simply the general decline of union coverage in Canada over the last 30 years. It should be noted that the comparison should only be in the rate of decline of coverage over the last 30 years and not the actual figure for all Canadians, as Morissette et al. (2005) uses a different definition of coverage which excludes those under collective

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agreement but not formally union members. While the figures may differ the general trend should be the same (Akyeampong 2000).

Age and Gender

The demographic shift over the last 30 years from lower union coverage based on gender to lower union coverage based on age (Morissette et al. 2005) has been noted for all Canadians. Of interest would be whether this same trend significantly contributes to the lower coverage rate for immigrants over time.

The male/female gender distribution for Canadian-born employees in non-management occupations in 2008 was 49.4 to 50.6. This is identical to the ratio for Canadian immigrants, and it is distributed evenly over all periods covered.

Table 5

Union coverage, Sex by YSM

Immigrant status	Male	Female	All
Canadian-born	35%	36%	35%
All immigrants	27%	27%	27%
00-05 years ago	20%	17%	19%
06-10 years ago	23%	20%	22%
11-15 years ago	21%	24%	22%
16-20 years ago	27%	26%	26%
21-30 years ago	31%	33%	32%
31-plus years ago	39%	37%	38%
All	34%	34%	34%

Canadians age 17-64, employees in non-managerial occupations

In terms of coverage, the only point of note is the slightly higher relative coverage rate for more recent male immigrants in the 0 to 5 and 6 to 10 year groups. While the overall

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coverage gap between Canadian-born and Canadian immigrants is significant, a gender gap does not appear to exist.

The age distribution was examined using age groups 17 to 24, 25 to 54 and 55 to 64.

The ratio for Canadian immigrants is 9:74:16 and for Canadian-born is 19:69:11 when looking at Canadians age 17 to 64, employed in non-managerial occupations.

Table 6

Union coverage, Age by YSM

Immigrant status	17-24	25-54	55-64	All
Canadian-born	17%	39%	43%	35%
All immigrants	13%	27%	35%	27%
00-05 years ago	12%	20%	25%	19%
06-10 years ago	10%	24%	20%	22%
11-15 years ago	14%	24%	24%	22%
16-20 years ago	14%	28%	27%	26%
21-30 years ago	25%	31%	37%	32%
31-plus years ago	0%	40%	38%	38%
All	17%	37%	41%	100%

Canadians age 17-64, employees in non-managerial occupations

The union coverage rates of the same age groups for Canadian immigrants and the Canadian-born are indicated in Table 6. Of interest is the lower relative coverage rate for all immigrants in the 25 to 54 age group, and the lower relative coverage rate for Canadian-born in the 55-64 age group, where each has a 5% greater relative distribution.

The concept of generation 1.5 (Rumbaut, Ima 1988), which holds that children who immigrate with their parents at a young age can resemble second generation children in their linguistic ability and other indicators of acculturation than they do older first

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generation immigrants, may be a factor in the union coverage of 17 to 24 year old immigrants arriving 21-30 years ago. However, their impact on overall union coverage is not significant as this age group only comprised less than 3% of immigrants who arrived 21-30 years ago.

Educational attainment

Table 7

Distribution, Highest level of education by YSM

Immigrant status	HS or less	Some PS	U degree	All
Canadian-born	43%	38%	19%	100%
All immigrants	36%	29%	35%	100%
00-05 years ago	5%	4%	9%	19%
06-10 years ago	5%	4%	7%	16%
11-15 years ago	6%	4%	5%	15%
16-20 years ago	6%	5%	4%	15%
21-30 years ago	5%	5%	5%	15%
31-plus years ago	9%	7%	5%	21%
All	41%	36%	22%	100%

Canadians age 17-64, employees in non-managerial occupation

Table 7 confirms what has been noted in the Census and other Statcan social surveys regarding education attainment of immigrants and the Canadian-born.

Table 8 does not give an indication of where the highest level of education was attained, although this can be ascertained from the new immigrant questions asked in the LFS (Tables 9 and 10). However, it does indicate that the return to education for more recent immigrants with respect to union coverage is much poorer than for immigrants arriving over twenty years ago.

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Table 8

Union coverage, Highest level of education by YSM

Immigrant status	HS or less	Some PS	U degree	All
Canadian-born	28%	39%	46%	35%
All immigrants	23%	30%	28%	27%
00-05 years ago	14%	20%	21%	19%
06-10 years ago	16%	24%	25%	22%
11-15 years ago	17%	26%	25%	22%
16-20 years ago	22%	28%	29%	26%
21-30 years ago	28%	34%	34%	32%
31-plus years ago	34%	38%	42%	38%
All	27%	37%	41%	34%

Canadians age 17-64, employees in non-managerial occupation

Table 9

Distribution, Age at immigration by Country of highest level of education

Country	0-17	18-24	25-54	55-64	All
Canada	28%	11%	11%	0%	48%
Other	20%	14%	19%	0%	53%
All	47%	24%	30%	0%	100%

Canadians age 17-64, employees in non-managerial occupations

Tables 9 and 10 both use the Country of highest level of education variable that was introduced in January 2006 with the other immigration related variables. The question is only asked to immigrants who have indicated that they have pursued post-secondary education, so the reader is cautioned not to relate Table 8, which looks at the highest level of education attained for all respondents, with those of 9 and 10.

As expected, most children under the age of 18 at the time of immigration went on to pursue post-secondary studies in Canada, whereas those arriving between the ages of 25 and 54 were nearly twice as likely to complete their studies in their country of origin.

Table 10

Union coverage, Age at immigration by Country of highest level of education

Country	0-17	18-24	25-54	55-64	All
Canada	28%	32%	32%	0%	30%
Other	22%	24%	23%	12%	22%
All	25%	27%	26%	12%	26%

Canadians age 17-64, employees in non-managerial occupations

Whereas the overall return to education for Canadian immigrants was low relative to their Canadian-born counterparts, the return to Canadian post-secondary education for immigrants in terms of union coverage is significant. Immigrants with post secondary education from Canada had a 36% greater incidence of union coverage than their counterparts educated in another country.

Establishment size

Another factor cited in the literature as having an impact on union coverage rates is the size of the firm or establishment at which Canadians are employed. Whether there is a marked difference in coverage between Canadian immigrants and the Canadian-born based on the size of their employer should be noted.

While there do not seem to be any significant disparities in distribution, the coverage rate disparity between the Canadian-born and Canadian immigrants appears to be wide overall, and significantly so for all immigrants in the two larger employer establishment size categories, where union coverage rates are higher for the Canadian-born by over 40% in establishments with 100-500 employees and over 50% for establishments with greater than 500 employees. There does appear to be convergence as the years since

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Table 11

Distribution, Establishment size of employer by YSM

Immigrant status	LT 20	20 to 99	100 to 500	GT 500	All
Canadian-born	33%	33%	20%	13%	100%
All immigrants	32%	32%	23%	14%	100%
00-05 years ago	6%	6%	4%	2%	19%
06-10 years ago	5%	5%	4%	2%	16%
11-15 years ago	5%	5%	3%	2%	15%
16-20 years ago	5%	5%	3%	2%	15%
21-30 years ago	4%	4%	4%	3%	15%
31-plus years ago	6%	7%	5%	3%	21%
All	33%	33%	21%	13%	100%

Canadians age 17-64, employees in non-managerial occupations

Table 12

Union coverage, Establishment size of employer by YSM

	LT 20	20 to 99	100 to 500	GT 500	All
Canadian-born	16%	37%	48%	61%	35%
All immigrants	12%	28%	34%	46%	27%
00-05 years ago	9%	19%	26%	32%	19%
06-10 years ago	11%	23%	26%	37%	22%
11-15 years ago	9%	22%	30%	42%	22%
16-20 years ago	14%	26%	33%	47%	26%
21-30 years ago	11%	33%	39%	53%	32%
31-plus years ago	17%	40%	45%	58%	38%
All	15%	35%	45%	58%	34%

Canadians age 17-64, employees in non-managerial occupations

migration increase, which would appear to indicate that firm size in and of itself is not a significant factor in the union coverage outcome of immigrants as would be other variables related to labour market learning and human capital development.

Industry

Certain industries have higher union coverage rates than others. The decline in employment in some sectors, such as manufacturing, is cited as one of the factors accounting for the decline of overall union coverage rates in Canada over the last 30 years (Morissette et al. 2005). Over or under-representation of immigrants in industries that have lower or higher union coverage rates, respectively, could be a significant factor in the lower coverage rate found among Canadian immigrants. As noted in the research (Reitz, Verma 2004), employment by industry could be a significant factor in explaining under-coverage. The problem up to this point was that WES and SLID did not contain a large enough sample to explore this question. The addition of the immigration questions to the LFS in January 2006 allows us to explore this question.

The following charts use the North American Industry Classification System (NAICS 2002), at different levels of aggregation.

There is a significant under-representation of Canadian immigrants in the Education, Health and Public Administration (EHPA) sectors, as the Canadian-born have 28% higher representation in this sector (22% to 28%, respectively). This under-representation is more pronounced for immigrants in Canada less than 10 years, where representation in this sector is only 17%. There also appears to be significant over-representation of Canadian immigrants relative to Canadian-born in the Finance, Real

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Chart 3

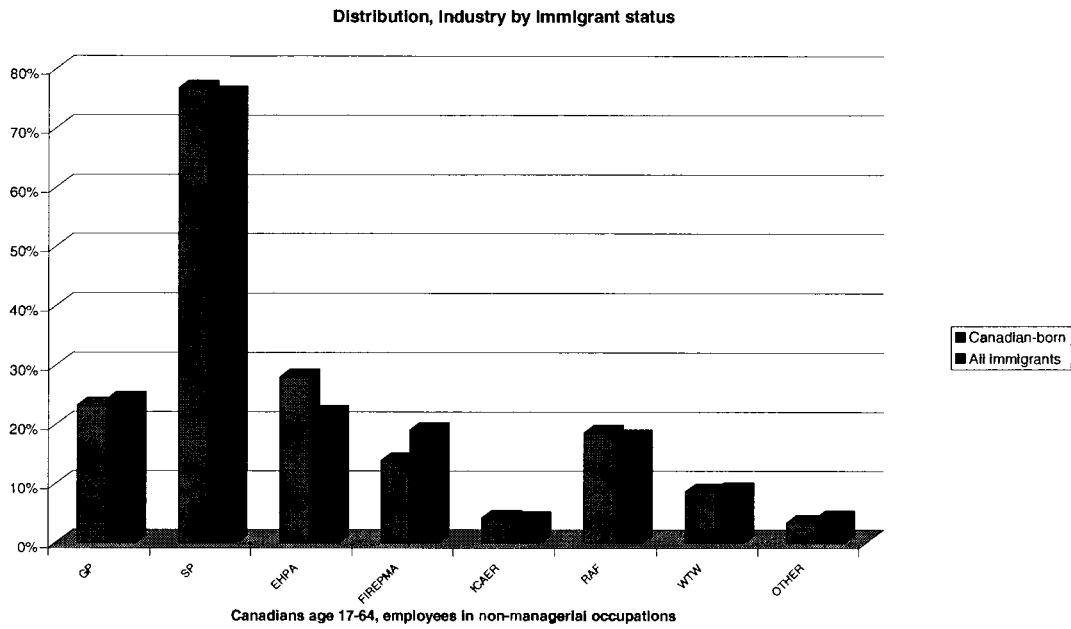
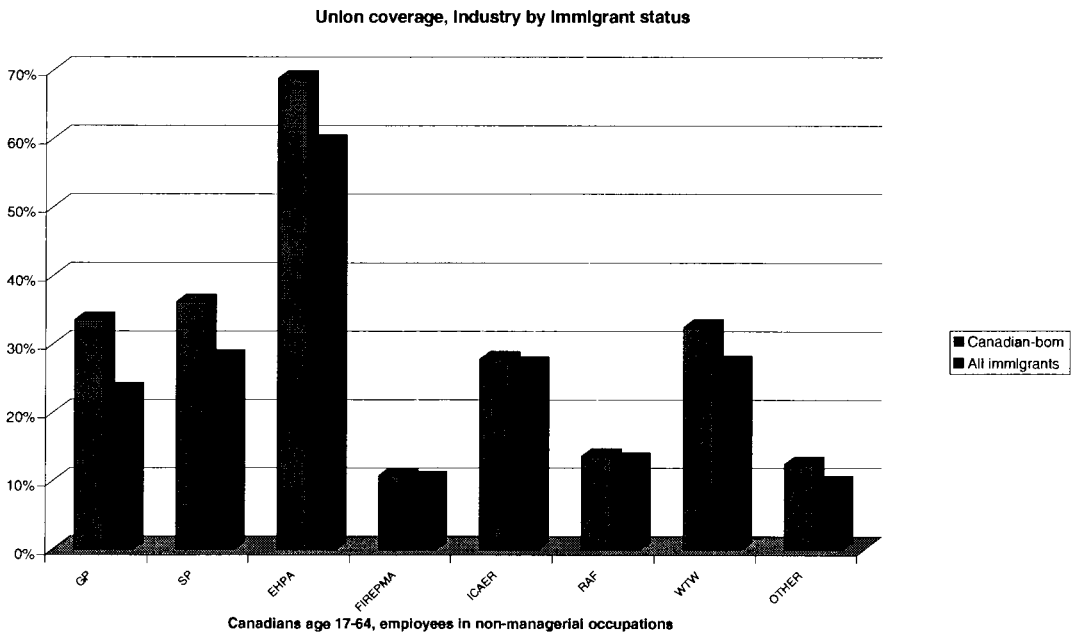


Chart 4



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Estate and Professional Services (FIREPMA) sector, as Canadian immigrants have 36% higher representation than the Canadian-born (19% to 14%, respectively).

Union coverage rates are highest by a wide margin in the EHPA sector (67%), where immigrants are under-represented, and lowest in the FIREPMA sector (11%), where immigrants are over-represented. The stark contrast in distribution of occupation industry appears to be a significant contributing factor to the lower overall union coverage rate of Canadian immigrants.

Occupation

Certain occupations may provide a greater exposure to union coverage. Most of the literature that looks at immigrant labour market outcomes concentrates on initial occupation of employment and intended occupation of employment, arguing that a transition from the former to the latter occurs over time. This may help in part to explain immigrant union coverage increase over time.

As Chart 6 and Chart 7 indicate, the distribution effects of occupation are similar to those of industry, where immigrants are over-represented in certain areas such as Processing, Manufacturing and Utilities (PMU) where union coverage rates are lower, and under-represented in other areas such as Social Science, Education, Government Service and Religion (SSEGR), where union coverage is highest. While there does not appear to be under-representation of immigrants in Natural and Applied Sciences (NAS) and Health (HLTH), this does not take into consideration that twice as many immigrants have degrees in these areas as Canadian-born (Census 2006).

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Chart 6

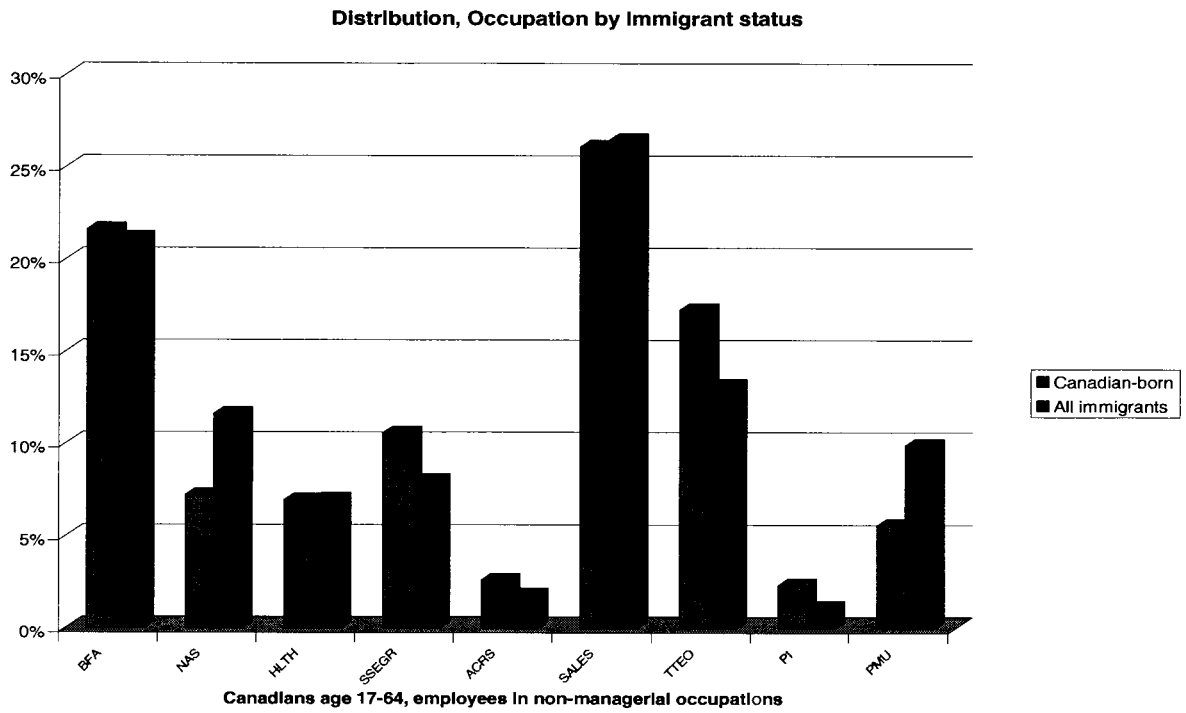
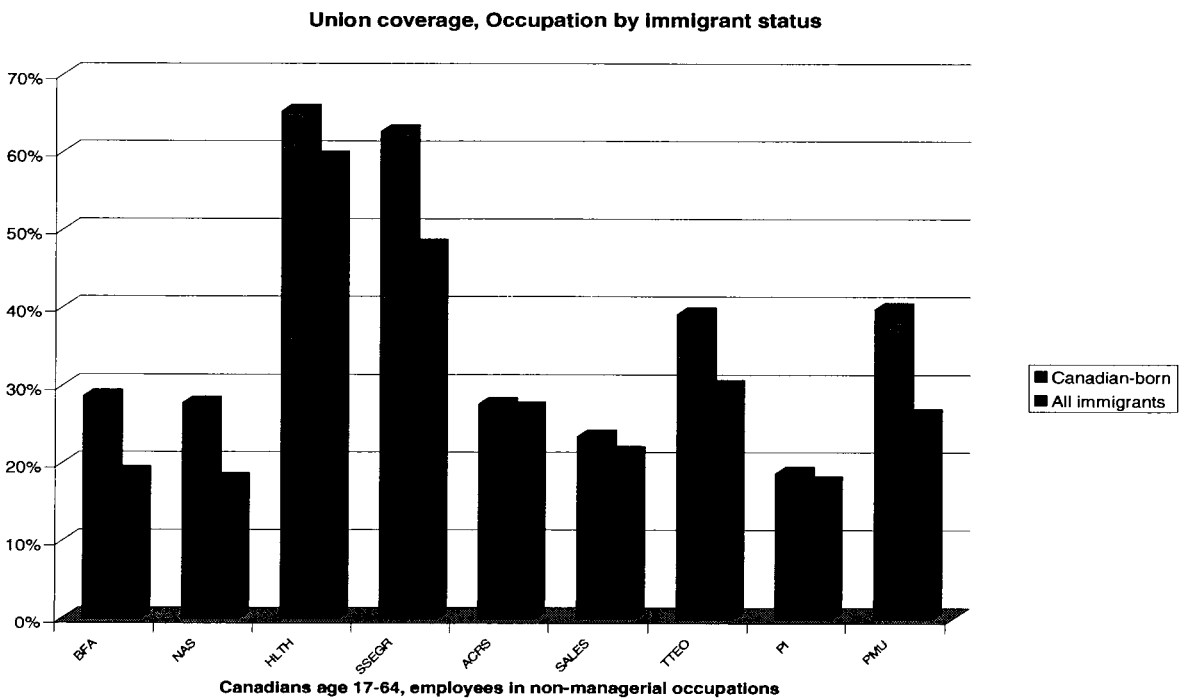


Chart 7



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Regional variation within Canada

As generally reported by the Census and other Statcan social surveys, immigrants are highly concentrated in the large urban CMA centres in Ontario, British Columbia and Québec. This trend holds relatively stable over all periods of migration, with slight shifts away from Québec and to BC and Alberta noted over the last 30 years. This may have to do with country of origin effects, as there were more immigrants arriving from Europe 20 plus years ago, whereas more recent immigrants are largely of Asian origin and likely attracted to Asian enclaves in lower mainland BC or simply higher wages and lower unemployment in Alberta.

The proportion of immigrants living in urban CMAs in Ontario is 52%, the majority of all employed immigrants in non-managerial occupations in 2008. Also of note is the relative proportion of Canadian immigrants living in the Ontario CMA centres relative to the Canadian-born population, which is more than double (52% to 25%).

Chart 8

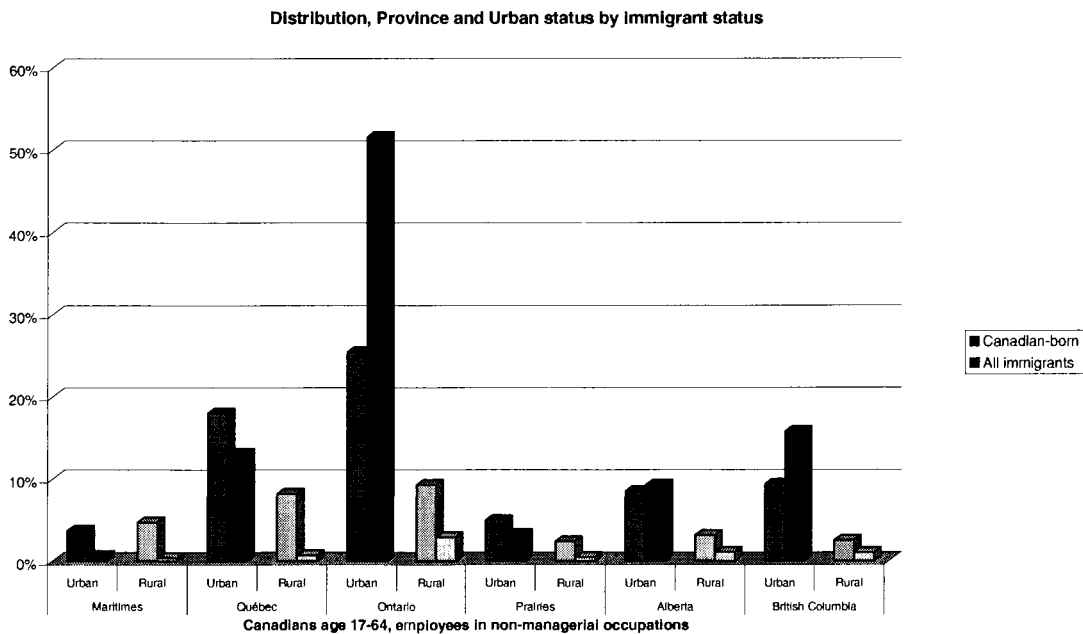
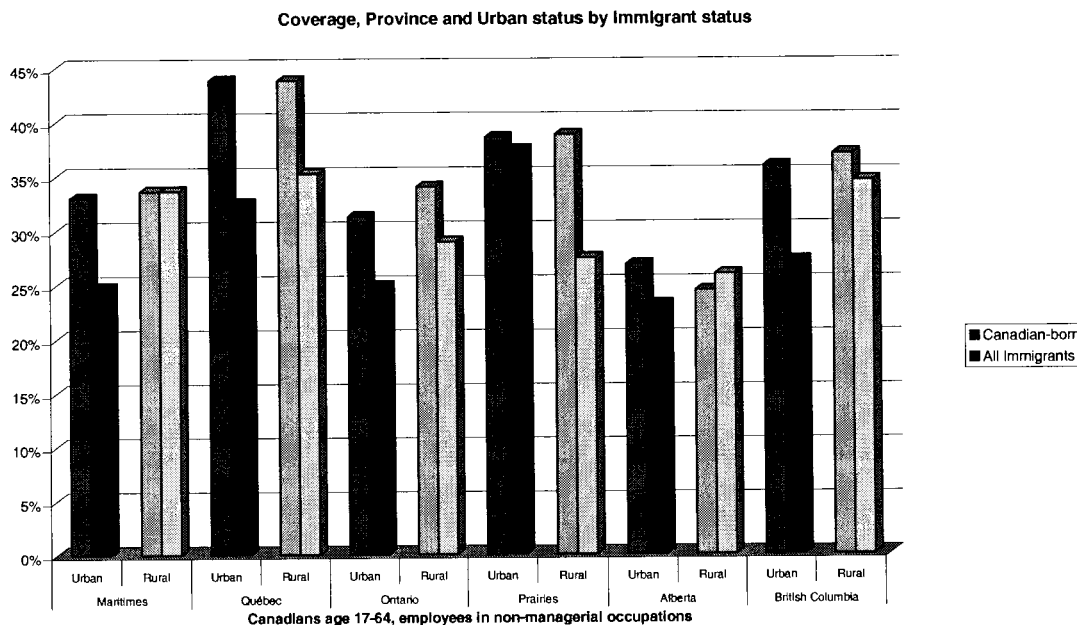


Chart 9



The very high concentration of immigrants in Ontario urban CMAs has an effect on their overall union coverage rates as these centres have the lowest rate of coverage for immigrants outside of Alberta. The rate of coverage also happens to be lower for the Canadian-born living in the urban CMA centres in Ontario, indicating geographical concentration in lower-coverage areas as a significant factor in the lower overall union coverage rate of immigrants.

Regression Analysis

Tables 13 through 21 present regression results for logistical regressions on union coverage as well as linear regression on wages and tenure for the Canadian-born, immigrants of European origin and immigrants of non-European origin.

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A few general notes apply to all of the regressions. Age, Years since migration, Weekly earnings and Tenure are the only continuous variables. The dummy categories excluded for some variables may not be obvious, so a listing of all of the exclusions merit mention. For Country of birth, Canada is excluded. For Sex, female is excluded. For Education level, high school or less is excluded. For Full-time/Part-time status, Part-time is excluded. For Permanent/temporary status, Temporary is excluded. For establishment size, Less than 20 is excluded. For Industry, Retail, Accommodation and Food is excluded. Occupation has been excluded as the effects are similar to those of Industry, and including both causes irregular results for the logistical regression model, it does not detract from the explanatory power of the models (R-square values vary by 0.01 to 0.02 between the models containing both Occupation and Industry and either alone). For Province, Ontario is excluded (the LFS does not collect data for the Territories). For CMA Urban, all non-CMA responses are excluded.

Tables 13 to 15 present the results for modelling the probability of having union coverage using the different socio-demographic and labour market characteristics identified. The main results are the odds ratios. The reader is reminded that an odds ratio of greater than 1 indicates that the odds of an event, in this case union coverage, are greater for the target group, or the dummy variable indicated. It should also be noted that all responses for dummy variables are relative to the excluded dummy group.

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Table 13

Model: Binary logit
 Response Variable: Union coverage
 Weight: Final weight (annualised)

Canadian-born

Observations Read: 83215
 Observations Used: 83215

Probability modeled is with union coverage (Union coverage = 1)

Variable	Parameter Estimate	Standard Error	Odds Ratio Point Estimate
Intercept	-3.8269	0.00438	
Age	0.0485	0.000275	1.050
Age, squared	-0.00065	5.869E-06	0.999
Sex			
Male	0.4213	0.0018	1.524
Education level			
Some post-secondary	0.0179	0.00183	1.018
University degree	-0.0535	0.00236	0.948
Full-time/Part-time status			
Full-time	0.1191	0.00245	1.126
Permanent/temporary status			
Permanent	0.1356	0.00255	1.145
Establishment size (employees)			
20 to 99	1.0723	0.0021	2.922
100 to 500	1.5354	0.00233	4.643
500 plus	1.7444	0.00265	5.722
Industry			
Goods producing	0.6621	0.00282	1.939
Wholesale, Transport, Warehousing	0.6929	0.00337	2.000
Finance, Real Estate, Prof/Mgmt/Admin	-0.5585	0.00366	0.572
Education, Health, Public Administration	2.4422	0.00281	11.498
Info, Culture, Arts, Entertainment, Recreation	0.634	0.0043	1.885
Other Services	0.0862	0.00588	1.090
Provinces			
Maritimes	0.0729	0.0031	1.076
Québec	0.6695	0.00203	1.953
Manitoba	0.3454	0.00417	1.412
Saskatchewan	0.4306	0.00436	1.538
Alberta	-0.2138	0.00278	0.808
British Columbia	0.4122	0.00266	1.510
CMA Urban/Rural status			
CMA Urban	-0.0715	0.00177	0.931

Response Profile

1	30539
0	52676

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Table 14

Model: Binary logit
 Response Variable: Union coverage
 Weight: Final weight (annualised)

European origin

Observations Read: 4881
 Observations Used: 4881

Probability modeled is with union coverage (Union coverage = 1)

Variable	Parameter Estimate	Standard Error	Odds Ratio Point Estimate
Intercept	-4.3165	0.0206	
Years since migration	0.0217	0.00075	1.022
Years since migration, squared	-0.00035	0.000012	1.000
Country of highest level of education			
Canada	0.1977	0.00836	1.219
Age	0.0404	0.00111	1.041
Age, squared	-0.0003	0.00002	1.000
Sex			
Male	0.5089	0.00609	1.663
Education level			
Some post-secondary	-0.3157	0.00871	0.729
University degree	-0.5955	0.00883	0.551
Full-time/Part-time status			
Full-time	-0.087	0.00854	0.917
Permanent/temporary status			
Permanent	0.4261	0.00999	1.531
Establishment size (employees)			
20 to 99	1.1143	0.00762	3.047
100 to 500	1.4535	0.00811	4.278
500 plus	1.6004	0.00916	4.955
Industry			
Goods producing	0.7171	0.0102	2.049
Wholesale, Transport, Warehousing	0.7273	0.012	2.070
Finance, Real Estate, Prof/Mgmt/Admin	-0.2825	0.0122	0.754
Education, Health, Public Administration	2.3878	0.0104	10.890
Info, Culture, Arts, Entertainment, Recreation	0.7594	0.0146	2.137
Other Services	-0.00545	0.0215	0.995
Provinces			
Maritimes	-0.0763	0.0199	0.927
Québec	0.3025	0.00838	1.353
Manitoba	0.2765	0.0153	1.318
Saskatchewan	0.2229	0.0266	1.250
Alberta	-0.1712	0.00942	0.843
British Columbia	0.2553	0.00761	1.291
CMA Urban/Rural status			
CMA Urban	0.0393	0.00798	1.040
Response Profile			
1		1645	
0		3236	

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Table 15

Model: Binary logit
 Response Variable: Union coverage
 Weight: Final weight (annualised)

non-European origin

Observations Read: 7546
 Observations Used: 7546

Probability modeled is with union coverage (Union coverage = 1)

Variable	Parameter Estimate	Standard Error	Odds Ratio Point Estimate
Intercept	-4.0629	0.0174	
Years since migration	0.0303	0.000652	1.031
Years since migration, squared	-0.0004	0.000014	1.000
Country of highest level of education			
Canada	-0.2025	0.00585	0.817
Age	0.0204	0.000803	1.021
Age, squared	-0.00022	0.000016	1.000
Sex			
Male	0.3405	0.00438	1.406
Education level			
Some post-secondary	0.1217	0.00625	1.129
University degree	-0.00999	0.0058	0.990
Full-time/Part-time status			
Full-time	-0.1762	0.00631	0.838
Permanent/temporary status			
Permanent	0.5098	0.00713	1.665
Establishment size (employees)			
20 to 99	1.0135	0.00585	2.755
100 to 500	1.4352	0.00618	4.201
500 plus	1.6415	0.00684	5.163
Industry			
Goods producing	0.0977	0.00708	1.103
Wholesale, Transport, Warehousing	0.4766	0.00831	1.611
Finance, Real Estate, Prof/Mgmt/Admin	-0.5118	0.00817	0.599
Education, Health, Public Administration	2.1266	0.00696	8.387
Info, Culture, Arts, Entertainment, Recreation	0.4674	0.0110	1.596
Other Services	-0.1239	0.0140	0.884
Provinces			
Maritimes	-0.1951	0.0293	0.823
Québec	0.6038	0.0058	1.829
Manitoba	0.5921	0.0109	1.808
Saskatchewan	0.8492	0.0229	2.338
Alberta	0.0286	0.00712	1.029
British Columbia	0.3223	0.00575	1.380
CMA Urban/Rural status			
CMA Urban	0.0705	0.0120	1.073
Response Profile			
1		1993	
0		5553	

The response profile corresponds with the earlier tables presented indicating that Canadians are more likely than Canadian immigrants from either group to be unionised, which is consistent with the literature. Of interest is that Canadian immigrants of both European and non-European origin had higher odds of being unionised if working in larger establishments with over 500 employees than Canadian-born. In industries such as EHPA, where the odds of having coverage are high for all groups, the odds for the Canadian-born are higher than for both immigrant groups. Immigrants of European origin have greater odds than those of non-European origin, again consistent with the literature on country of origin effects. Also of note is the geographic distribution effect noted earlier. Immigrants of non-European origin have generally better odds of being unionised away from Ontario than do the Canadian-born and immigrants of European origin. As noted in the distribution tables, the vast majority are located in Ontario. Apart from the province of residence, immigrants have greater odds of being unionised if living in a CMA, the opposite of the result for the Canadian-born.

Convergence is positive for both groups of immigrants to Canada, with every year since migration contributing to an increase in the probability of union coverage, although the returns to every year since migration are higher for immigrants of non-European origin, also consistent with the literature, as it indicates the wider early gap and greater distance to convergence for non-European immigrants.

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Table 16

Model: Linear regression model
 Dependent Variable: Log weekly earnings
 Weight: Final weight (annualised)

	Canadian-born, no union coverage		Canadian-born, with union coverage	
	Observations Read: 52676 Observations Used: 52676		Observations Read: 30539 Observations Used: 30539	
	Dependent Mean: 6.30251		Dependent Mean: 6.67219	
Variable	Parameter Estimate	Standard Error	Parameter Estimate	Standard Error
Intercept	4.55824	0.00828	4.91699	0.01355
Age	0.03575	0.0006153	0.03381	0.0008051
Age, squared	-0.00062417	0.0000138	-0.00055243	1.668E-05
Sex				
Male	0.19746	0.00413	0.13946	0.0049
Education level				
Some post-secondary	0.12461	0.00444	0.13041	0.00514
University degree	0.31487	0.00595	0.33353	0.00629
Full-time/Part-time status				
Full-time	0.98236	0.0054	0.78394	0.00664
Permanent/temporary status				
Permanent	0.1708	0.00586	0.13626	0.00688
Establishment size (employees)				
20 to 99	0.07826	0.00449	0.01563	0.00659
100 to 500	0.15251	0.00569	0.0451	0.00685
500 plus	0.26065	0.00759	0.11981	0.00713
Industry				
Goods producing	0.28316	0.00598	0.40983	0.00987
Wholesale, Transport, Warehousing	0.241	0.00774	0.31401	0.01139
Finance, Real Estate, Prof/Mgmt/Admin	0.25551	0.00617	0.19346	0.01327
Education, Health, Public Administration	0.22884	0.00684	0.35309	0.00929
Info, Culture, Arts, Entertainment, Recreation	0.15199	0.00973	0.24705	0.01439
Other Services	0.13967	0.00994	0.35526	0.02133
Provinces				
Maritimes	-0.15844	0.00734	-0.12828	0.00858
Québec	-0.07547	0.00512	-0.12211	0.00535
Manitoba	-0.05501	0.01057	-0.09297	0.01104
Saskatchewan	0.0324	0.01089	-0.03521	0.01157
Alberta	0.19875	0.00614	0.07757	0.00819
British Columbia	0.0692	0.00644	0.01428	0.00721
CMA Urban/Rural status				
CMA Urban	0.01325	0.00436	0.00982	0.00476
R-Square	0.6678		0.5628	
Adj R-Sq	0.6677		0.5624	

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Table 17

Model: Linear regression model
 Dependent Variable: Log weekly earnings
 Weight: Final weight (annualised)

	European origin, no union coverage		European origin, with union coverage	
	Observations Read: 3236 Observations Used: 3236		Observations Read: 1645 Observations Used: 1645	
	Dependent Mean: 6.44929		Dependent Mean: 6.68741	
Variable	Parameter Estimate	Standard Error	Parameter Estimate	Standard Error
Intercept	4.46487	0.0476	4.80153	0.08894
Years since migration	0.00346	0.00206	0.0038	0.00301
Years since migration, squared	-0.00000248	3.416E-05	-0.00003066	0.0000464
Country of highest level of education				
Canada	-0.02886	0.02433	-0.00207	0.03173
Age	0.0316	0.00283	0.01721	0.00453
Age, squared	-0.0005717	5.459E-05	-0.00026171	7.957E-05
Sex				
Male	0.237	0.01677	0.22474	0.02307
Education level				
Some post-secondary	0.15422	0.02526	0.13423	0.0329
University degree	0.29932	0.02494	0.28798	0.03468
Full-time/Part-time status				
Full-time	0.87421	0.02357	0.72011	0.03169
Permanent/temporary status				
Permanent	0.2321	0.02695	0.23948	0.03741
Establishment size (employees)				
20 to 99	0.11666	0.01888	0.08783	0.03255
100 to 500	0.20327	0.02214	0.0993	0.03344
500 plus	0.31793	0.02905	0.18303	0.0352
Industry				
Goods producing	0.28824	0.02508	0.42745	0.04697
Wholesale, Transport, Warehousing	0.24403	0.03174	0.33134	0.05375
Finance, Real Estate, Prof/Mgmt/Admin	0.33251	0.02522	0.22006	0.05816
Education, Health, Public Administration	0.24335	0.02871	0.4652	0.04511
Info, Culture, Arts, Entertainment, Recreati	0.18124	0.03933	0.20757	0.06463
Other Services	0.25292	0.04143	0.27122	0.10353
Provinces				
Maritimes	-0.15009	0.05528	-0.1038	0.0755
Québec	-0.04094	0.02445	-0.12992	0.03151
Manitoba	-0.16506	0.04803	-0.13143	0.05557
Saskatchewan	-0.00205	0.08044	0.02233	0.09415
Alberta	0.13512	0.02598	0.03249	0.03724
British Columbia	0.03883	0.02216	0.04815	0.0286
CMA Urban/Rural status				
CMA Urban	0.02539	0.02349	-0.01141	0.03015
	R-Square	0.5978	0.4736	
	Adj R-Sq	0.5945	0.4652	

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Table 18

Model: Linear regression model
 Dependent Variable: Log weekly earnings
 Weight: Final weight (annualised)

	non-European origin, no union coverage		non-European origin, with union coverage	
	Observations Read: 5553 Observations Used: 5553		Observations Read: 1993 Observations Used: 1993	
	Dependent Mean: 6.30268		Dependent Mean: 6.54827	
Variable	Parameter Estimate	Standard Error	Parameter Estimate	Standard Error
Intercept	4.53512	0.04343	4.92839	0.08073
Years since migration	0.00792	0.00179	0.01018	0.00298
Years since migration, squared	0.00001227	0.0000407	-0.00011181	6.392E-05
Country of highest level of education				
Canada	0.07278	0.01722	0.03681	0.02464
Age	0.02288	0.0021	0.02534	0.00371
Age, squared	-0.00046442	4.396E-05	-0.00046034	7.205E-05
Sex				
Male	0.20412	0.01191	0.15219	0.01971
Education level				
Some post-secondary	0.07333	0.01766	0.03309	0.02777
University degree	0.25575	0.01619	0.23659	0.02613
Full-time/Part-time status				
Full-time	0.93347	0.01759	0.73958	0.02657
Permanent/temporary status				
Permanent	0.21252	0.01798	0.10517	0.03082
Establishment size (employees)				
20 to 99	0.05629	0.01406	0.06784	0.02851
100 to 500	0.17024	0.01625	0.09159	0.02922
500 plus	0.26097	0.02098	0.22147	0.03031
Industry				
Goods producing	0.22057	0.01773	0.25931	0.03646
Wholesale, Transport, Warehousing	0.1962	0.02359	0.27399	0.04138
Finance, Real Estate, Prof/Mgmt/Admin	0.27403	0.01789	0.18159	0.0425
Education, Health, Public Administration	0.24314	0.02197	0.35402	0.03284
Info, Culture, Arts, Entertainment, Recreation	0.17014	0.03374	0.09527	0.05314
Other Services	0.10166	0.02798	0.15308	0.07421
Provinces				
Maritimes	-0.12506	0.08055	0.05198	0.12368
Québec	-0.11182	0.01791	-0.12422	0.0244
Manitoba	-0.11303	0.03692	-0.17726	0.04532
Saskatchewan	0.00803	0.0758	-0.00267	0.08655
Alberta	0.1126	0.01912	0.00318	0.03228
British Columbia	0.00429	0.01609	-0.00285	0.02529
CMA Urban/Rural status				
CMA Urban	-0.03443	0.03315	-0.06654	0.05205
	R-Square	0.6073	0.5150	
	Adj R-Sq	0.6055	0.5086	

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Tables 16 to 18 present the results for modelling the natural logarithm of weekly earnings using the different socio-demographic and labour market characteristics identified. The reader is reminded that taking the exponent of the coefficient estimates provides rough dollar figure guidelines. It should also be noted that all responses for dummy variables are relative to the excluded dummy group.

Union coverage has a significant impact on all three groups observed. The relative difference, however, is of interest. Presenting the mean wage for those without relative to those with coverage, for Canadian-born the figures are \$545 and \$790, for immigrants of European origin it is \$635 to \$805, and for those of non-European origin it is \$545 to \$700 (all figures rounded to nearest \$5). Of interest is the mean weekly earnings of European immigrants being greater than that of the Canadian-born as well as non-European origin immigrants. It can be noted that the general impact on earnings for Canadian immigrants from both groups is positive, although both significantly less so than for the Canadian-born. It should also be noted that while the coefficients for the years since migration for both immigrant groups are positive, the returns to every additional year in Canada after migration for those in the non-European group has a larger, almost twice as large, contribution to the increase in earnings. Both of these findings are consistent with Bloom et al. (1995), where immigrants from Asia, Africa and Latin America had lower earnings and as a result had greater increases over time as they converged with immigrants of European origin and the Canadian-born. In terms of industry of occupation, Education, Health and Public Administration, where earlier results showed under-representation of Canadian immigrants, had the strongest

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contribution to weekly earnings relative to employment in Retail, Accommodation and Food, followed by the Good Producing sector. The difference in union coverage by province does not reflect the impact on weekly earnings, as living in Alberta had the greatest impact on earnings relative to living in Ontario. Those living in the Maritimes had significantly lower earnings, while those in Québec and Manitoba had slightly lower earnings. The urban/rural effect on earnings was significant and negative for Canadian immigrants of non-European origin even though the effect was not as significant on union coverage when controlling for other factors, indicating that the crowding of Canadian immigrants of non-European origin into urban CMA centres has a negative impact on their earnings.

Tables 19 to 21 present the results for modelling the natural logarithm of tenure in weeks using the different socio-demographic and labour market characteristics identified. The reader is reminded that taking the exponent of the coefficient estimates provides rough weeks of tenure guidelines. It should also be noted that all responses for dummy variables are relative to the excluded dummy group.

Union coverage has a significant impact on all three groups observed. The relative difference, however, is of interest. Presenting the mean weeks of tenure for those without relative to those with coverage, for Canadian-born the figures are 30 weeks and 700 weeks, for immigrants of European origin it is 40 weeks and 80 weeks, and for those of non-European origin it is 30 weeks and 80 weeks (all figures rounded to nearest 5 weeks).

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Table 19

Model: Linear regression model
 Dependent Variable: Log tenure
 Weight: Final weight (annualised)

Variable	Canadian-born, no union coverage		Canadian-born, with union coverage	
	Parameter Estimate	Standard Error	Parameter Estimate	Standard Error
Intercept	1.12977	0.02369	1.12607	0.03966
Age	0.08394	0.00176	0.11273	0.00236
Age, squared	-0.00083696	0.0000395	-0.00113	4.879E-05
Sex				
Male	-0.05053	0.01182	0.03531	0.01435
Education level				
Some post-secondary	0.02271	0.01271	-0.05851	0.01503
University degree	0.00754	0.01704	-0.06402	0.01839
Full-time/Part-time status				
Full-time	0.09212	0.01545	0.14157	0.01942
Permanent/temporary status				
Permanent	1.00435	0.01678	1.04529	0.02012
Establishment size (employees)				
20 to 99	0.1297	0.01284	0.14843	0.01928
100 to 500	0.27968	0.01629	0.19266	0.02004
500 plus	0.45654	0.02172	0.29286	0.02088
Industry				
Goods producing	0.16653	0.01711	-0.04265	0.02887
Wholesale, Transport, Warehousing	0.12191	0.02216	0.02679	0.03333
Finance, Real Estate, Prof/Mgmt/Admin	0.07881	0.01765	-0.18384	0.03883
Education, Health, Public Administration	0.14506	0.01958	0.1557	0.02719
Info, Culture, Arts, Entertainment, Recreation	0.09102	0.02785	0.23386	0.04211
Other Services	0.12592	0.02845	-0.08387	0.0624
Provinces				
Maritimes	-0.11736	0.02101	-0.10634	0.02512
Québec	-0.03084	0.01465	0.00998	0.01565
Manitoba	-0.00735	0.03025	-0.07963	0.03231
Saskatchewan	-0.1376	0.03117	-0.10659	0.03385
Alberta	-0.25309	0.01758	-0.25241	0.02395
British Columbia	-0.13369	0.01842	-0.17585	0.02109
CMA Urban/Rural status				
CMA Urban	-0.04321	0.01247	-0.01643	0.01394
	R-Square	0.3151		0.3959
	Adj R-Sq	0.3148		0.3954

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Table 20

Model: Linear regression model
 Dependent Variable: Log tenure
 Weight: Final weight (annualised)

Variable	European origin, no union coverage		European origin, with union coverage	
	Parameter Estimate	Standard Error	Parameter Estimate	Standard Error
Intercept	0.56025	0.13244	0.65307	0.2356
Years since migration	0.03835	0.00574	0.04997	0.00797
Years since migration, squared	-0.00041813	9.505E-05	-0.00055062	0.0001229
Country of highest level of education				
Canada	-0.00983	0.06769	-0.06211	0.08405
Age	0.05951	0.00787	0.06633	0.01199
Age, squared	-0.00046195	0.0001519	-0.00039173	0.0002108
Sex				
Male	-0.00128	0.04666	0.03944	0.06111
Education level				
Some post-secondary	-0.02199	0.07029	-0.02348	0.08716
University degree	0.04732	0.06939	-0.01716	0.09188
Full-time/Part-time status				
Full-time	0.10968	0.06557	0.24555	0.08394
Permanent/temporary status				
Permanent	0.93074	0.07497	0.72496	0.09909
Establishment size (employees)				
20 to 99	0.18227	0.05254	0.00317	0.08622
100 to 500	0.22797	0.06161	0.14409	0.08859
500 plus	0.34853	0.08082	0.33007	0.09325
Industry				
Goods producing	0.13707	0.06978	0.29877	0.12442
Wholesale, Transport, Warehousing	0.20932	0.0883	0.22265	0.14238
Finance, Real Estate, Prof/Mgmt/Admin	0.13465	0.07018	0.04862	0.15406
Education, Health, Public Administration	0.31054	0.07987	0.37864	0.11948
Info, Culture, Arts, Entertainment, Recreation	0.12958	0.10944	0.58776	0.17121
Other Services	0.30426	0.11528	-0.41169	0.27425
Provinces				
Maritimes	-0.06024	0.15382	-0.00211	0.2
Québec	-0.07849	0.06803	-0.19179	0.08347
Manitoba	0.0427	0.13364	-0.03196	0.14722
Saskatchewan	-0.39371	0.22381	-0.13648	0.24939
Alberta	-0.24167	0.07229	-0.23401	0.09864
British Columbia	-0.05731	0.06167	0.05198	0.07577
CMA Urban/Rural status				
CMA Urban	0.12355	0.06536	-0.01597	0.07986
	R-Square	0.2918	0.3618	
	Adj R-Sq	0.2860	0.3516	

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Table 21

Model: Linear regression model
 Dependent Variable: Log tenure
 Weight: Final weight (annualised)

Variable	non-European origin, no union coverage		non-European origin, with union coverage	
	Parameter Estimate	Standard Error	Parameter Estimate	Standard Error
Intercept	0.47568	0.11851	0.88831	0.21469
Years since migration	0.07006	0.00488	0.08532	0.00792
Years since migration, squared	-0.00102	0.0001111	-0.00118	0.00017
Country of highest level of education				
Canada	0.01434	0.04699	-0.20637	0.06553
Age	0.04365	0.00572	0.04212	0.00986
Age, squared	-0.00032036	0.0001199	-0.00008389	0.0001916
Sex				
Male	-0.00576	0.03249	-0.10096	0.05241
Education level				
Some post-secondary	0.01589	0.04818	0.05937	0.07385
University degree	-0.0051	0.04419	-0.0529	0.06949
Full-time/Part-time status				
Full-time	0.22902	0.048	0.29601	0.07066
Permanent/temporary status				
Permanent	0.90422	0.04906	0.71311	0.08198
Establishment size (employees)				
20 to 99	0.05376	0.03837	0.10358	0.07581
100 to 500	0.18145	0.04433	0.19248	0.07772
500 plus	0.29736	0.05723	0.20432	0.0806
Industry				
Goods producing	0.29966	0.04837	0.24939	0.09697
Wholesale, Transport, Warehousing	0.2084	0.06437	0.3123	0.11005
Finance, Real Estate, Prof/Mgmt/Admin	0.1	0.04881	0.02066	0.11303
Education, Health, Public Administration	0.30768	0.05996	0.22487	0.08735
Info, Culture, Arts, Entertainment, Recreation	0.17345	0.09205	0.31796	0.14131
Other Services	0.2861	0.07635	0.00129	0.19735
Provinces				
Maritimes	0.07251	0.21979	0.19696	0.32893
Québec	-0.04666	0.04888	-0.15175	0.06489
Manitoba	0.01489	0.10075	-0.0238	0.12052
Saskatchewan	-0.27835	0.20682	-0.16483	0.23016
Alberta	-0.25823	0.05218	-0.27948	0.08585
British Columbia	0.03785	0.04391	0.06122	0.06725
CMA Urban/Rural status				
CMA Urban	0.0781	0.09046	-0.14855	0.13841
R-Square	0.2979		0.407	
Adj R-Sq	0.2946		0.3992	

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It should be noted that modelling tenure, especially when looking at differences for the Canadian-born and Canadian immigrants is not as precise. For one, a Canadian employee who starts his career in a unionised job is likely to continue with union coverage throughout their career, as clearly indicated by the wide disparity for Canadian-born with union coverage. Conversely, many immigrants will be starting their careers over again, where they would be the equivalent age of a Canadian-born mid-career. As such, any comparisons should be focused on the difference between the two immigrant groups.

It should also be noted that while the coefficients for the years since migration for both immigrant groups are positive, the returns to every additional year in Canada after migration for those in the non-European group has a larger, almost twice as large, contribution to the increase in tenure. In terms of industry of occupation, Education, Health and Public Administration, where earlier results showed under-representation of Canadian immigrants, had the strongest contribution to job tenure relative to employment in Retail, Accommodation and Food, followed, unexpectedly, by the Information, Culture, Arts, Entertainment and Recreation sectors. The difference in union coverage by province does not reflect the impact on job tenure, as living in any province other than Québec leads to lower job tenure than that of Ontario. In a reversal of the result for wages, living in Alberta results in the lowest job tenure outcome, reflecting the migrant worker phenomenon in that province. The urban/rural effect on job tenure was significant and positive for Canadian immigrants of European origin, the

opposite of the results for union coverage and earnings, which were neither significant nor large.

CONCLUSION

To summarize, the country from which Canadian immigrants originate, where they chose to reside after immigrating to Canada, the industries in which they work and the number of years they remain in Canada are significant factors contributing to their overall union coverage. Not all of these factors necessarily translate into higher wages or longer tenure, nor do they all have a similar direction or magnitude, as demonstrated through the regression results. The differences in union coverage, earnings and tenure not only differ between Canadian immigrants and the Canadian-born, but between immigrant groups, per the European and non-European distinction in the paper. This difference between immigrants based on country of origin, and possibly racial and socio-cultural differences have been found to exist in a significant body of literature.

Opportunities for future research exist. This paper does not look at immigrants' migration over time and contrast this with the overall Canadian trends in union coverage, earnings and tenure. An effort was made to contrast the results for these labour market outcomes with the historical rates reported in another study (Morissette et al. 2005). The results in that study are neither continuous, reliable (as the rates are sourced from different surveys) nor consistent with the definition of union coverage used in this paper. The reason that this was not pursued is that questions on immigrant labour market outcomes and union coverage were either very limited or not available at

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all in many of the larger social and labour market surveys 30 years ago. As noted, the LFS only started asking immigration related questions two years ago. As the data is collected moving forward, more precise evaluations of immigrant labour market outcomes relative to the Canadian-born as well as relative to other immigrant groups can be pursued.

Another opportunity exists for work in the nearer term looking at the impact that the sharp economic downturn beginning in mid-2008 has had on relative labour market outcomes of the Canadian-born and Canadian immigrants as well as different immigrant groups. The gap may have closed as the previously unseen job losses in certain manufacturing and primary industries, where the Canadian-born were historically over-represented and which have had historically high union coverage and wages over the last 30 years, mount.

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