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Centralized vs. Decentralized Immigrant Selection:

An Assessment of the BC Experience

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Centralized vs. Decentralized Immigrant Selection: An Assessment of the BC Experience[1]

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Abstract

As a complement to the centralized immigrant selection system in Canada, each province or territory has the right to select immigrants through the Provincial Nominee Program (PNP) to satisfy province-specific labour market demand.

This paper documents a large short-run earnings advantage of British Columbia Provincial Nominees (BC PNs) compared to Federal Skilled Workers (FSWs). Flexible empirical specification and Oxaca-Blinder decomposition suggest that this earning gap is largely due to the different wage structure of these two groups. PNs do not suffer the lack of credential recognition that FSWs do. Possible reasons for the different wage structure include: previously stayed in Canada, job-offer requirement, and “cream skimming”.

The findings raise debate on the decentralized immigration selection process. On one hand, employers can better recognize and reward the credentials of immigrants. On the other hand, employers tend to pick immigrants from developed English-speaking countries, which leads to possible employer discrimination in the labour market. Balancing the skills of immigrants with cultural diversity is a difficult task.

Executive Summary

Canada's immigration policy has been constantly trying to balance long-term demographic and economic goals and short-term labour market demand. The Federal Skilled Worker (FSW) program takes on the long-term view. It selects immigrants based on human capital characteristics that are believed to be crucial in their long-term establishment in the Canadian labour market. At the same time, each province signed an agreement with the federal government to launch their Provincial Nominee Programs (PNPs) since the late 1990s. These programs are designed to satisfy the province- specific short-term labour market demand.

Despite the fast expansion of the PNPs in the past decade, we know little about the economic outcome of the provincial nominees (PNs). Among the handful of existing papers, most of them have a specific focus on the Manitoba PNP. Some studies pool together all economic immigrants as the comparison group for PNs, which introduces complication in interpreting the findings due to the large variation among multiple sub-categories of PNPs.

To provide empirical evidence for economic outcomes of PNs and to reduce the complication due to variations in selection criteria across provinces, this paper focuses on the comparison of employment earnings between BC Provincial Nominees (BC PNs) and Federal Skilled Workers (FSWs).

The British Columbia PNP (BC PNP) is one of the first and largest nominee programs in Canada. Because British Columbia is traditionally one of the largest destinations for immigrants, the goal of the BC PNP is not to attract more immigrants, but to attract those who can contribute to the in-demand industries. Compared to FSWs, the selection criteria of the BC PNP are more stringent (applicants must have a job offer), while the shorter processing time is very appealing to those who qualify for both the PNP and FSW program.

Using the Longitudinal Immigrant Database (IMDB), this paper finds that the earnings of BC PNs are much higher than that of FSWs. One year after landing, the mean employment earnings of BC PNs are 3 times that of FSWs. Such an advantage declines with their stay in Canada, but still remains significant. After 4 years in Canada, BC PNs still earn twice as much as FSWs.

Compared to FSWs, BC PNs are less likely to have post-secondary education, more likely to speak the official language, and more likely to come from English-speaking developed countries (namely the UK, US, and Australia). These differences in observed characteristics can explain part of the earnings gap, but far from all of it.

With flexible empirical specification and Oxaca-Blinder decomposition, this paper shows that a higher return to education and higher return to official language ability for PNs are the main contributors to the earnings gap. In another words, unlike FSWs or immigrants in general, who suffer from lower return to human capital in the Canadian labour market (Ferrer and Riddell 2008; Skuterud and Su 2008), a PNs' education and language ability are more appropriately rewarded.

The findings lead to a further question: why do PNs have a higher return to language and education? This paper proposes three possible explanations: Canadian experience, the job offer requirement, and possible "cream skimming". Unfortunately, a direct test is not possible with available data. Nevertheless, supporting evidence is provided for all three explanations:

1. Data from Citizenship and Immigration Canada suggests that more than 70% of BC PNs have previously worked or studied in Canada, while less than 20% of FSWs have. Higher return to education and experience for PNs could be reflecting the higher return to human capital obtained in Canada.

2. Including the unemployment rate as an additional control (Aydemir and Skuterud, 2005; Green and Worswick, 2004; McDonald and Worswick, 1998), this paper finds that BC PNs are not significantly affected by macroeconomic conditions. It is likely to be the result of the job offer requirement for PNs. A pre-arranged job can help immigrants establish in Canada faster and protect them from a bad labour market and, therefore, contribute to their earning advantage.

3. Based on the federal point system, I assign a "Pseudo Point" to each immigrant according to the observed individual characteristics. The distribution of Pseudo Points is very similar for BC PNs and FSWs, which indicates that the majority of BC PNs would have passed the required 67-point threshold to qualify as FSWs. This distribution pattern is consistent with the "cream skimming" story: the short processing time of BC PNP attracts the most skilled immigrants that would have qualified as both a BC PN and a FSW.

Without further evidence, we cannot draw the conclusion that the BC PNP is so successful that policy makers should move away from FSWs. On the contrary, this paper raises a concern. It is true that involving employers in the immigrant selection process, as the BC PNP does, can serve the purpose of better recognizing the human capital of immigrants. However, selection, even discrimination, of the country of origin might arise. In fact, a larger proportion of BC PNs comes from countries like the UK and US. Giving the provincial government, and essentially employers, more power and responsibility to choose immigrants, Canada might be able to get better workers. However, would Canada still benefit from the diversified culture brought in by immigrants? The answer to such a question is beyond the scope of this paper.

1. Introduction

Canada's immigration policy has been constantly trying to balance long-term demographic and economic goals and short-term labour market demand. Since 1986, the federal government has been taking a long-term view by moving away from the traditional concept of "absorptive capacity"[2] (Green and Green 2004). The 2002 Immigration and Refugee Protection Act (IRPA) further strengthened such long-term focus. Federal policy places more emphasis on general human capital characteristics (such as education, work experience, and language ability) that are believed to be crucial for immigrants' long-term establishment in the Canadian labour market.

However, studies find that recent immigrants have been suffering from deteriorating entry earnings and the lack of assimilation to native earnings in the long run (Baker and Benjamin (1994), Aydemir and Skuterud (2005), Green and Worswick (2004)). The key reasons for such earnings disadvantages consist of changing composition of country of origin, declining return to foreign experience, and worse macroeconomic condition. Immigrants also suffer from the lack of recognition of their foreign education (Ferrer and Riddell 2008). These findings pose concern regarding whether the federal immigrant selection model effectively admits immigrants that can economically establish and succeed in Canada.

To complement the federal immigration policy and satisfy province-specific needs, provincial governments signed an agreement with the federal government and launched their own immigration program - Provincial Nominee Programs (PNPs) - in the late 1990s. These programs are not designed to

2 The rate of absorption depends on the current economic situation. When the unemployment rate is high, the absorptive capacity of new immigrants is low. According to this concept, the government should cut the number of immigrants when the economy is in recession. (Green and Green 2004).

replace the federal economic classes. Instead, they provide an additional and usually faster track for those who want to permanently reside in Canada. The number of immigrants through PNPs increased dramatically from 1,252 in the year 2000 to 30,378 in 2009. In 2009, Provincial Nominees (PNs) accounted for almost 20% of all Economic Class immigrants and 12% of total immigrants[3]. The Auditor General of Canada (2009) predicts that the PNP category could soon become the largest source of economic immigrants in Canada.

Further expansion of the Provincial Nominee Programs requires better understanding of the economic outcome of the nominees. Also, the different philosophy that is behind the design of federal program and provincial program makes the comparison between PNs and federal economic class immigrants important. However, we know very little about the economic outcome of the Provincial Nominees, let alone the comparison between PNs and other economic class immigrants[4].

In the literature, there are only a handful of researches on the PNP and most of them focus on Manitoba experience. In 2009, Carter and others carried out a survey that interviewed 100 PN principal applicants and 50 spouses of PN principal applicants in Manitoba. They conclude that although some PNs experience difficulties in finding jobs or getting training, the majority of Manitoba PNs express positive feelings about the labour market, education, housing, the PN program itself, and other related services (Carter et al. 2009). They find that the Manitoba Provincial Nominees have an advantage in the labour market: the percentage of their gross income that comes from employment is higher than the population as a whole. PNs also tend to have rapid

3 Data source: Citizenship and Immigration Canada

4 Under the federal-provincial immigration agreement, each province has the obligation to carry out PNP evaluation (Citizenship and Immigration Canada, 2010). However, at the time of this research, only British Columbia (BC) PNP evaluation is publicly available.

entry into the labour force and a low rate of unemployment. Carter, Morrish, and Amoyaw (2008) argue that the Manitoba PNP is successful in terms of allocating immigrants to smaller urban and rural communities.

The study that most related to this paper is by Pandey and Townsend (2010). Using the Longitudinal Immigration Database, they find that PNs have much higher earnings than other economic class immigrants and are more likely to stay in the nominating provinces. They pool together all economic class immigrants (including Business Class Immigrants, Federal Skilled Workers, and Provincial Nominees from all provinces except for Quebec) as the comparison group for PNs.

Such comparison using pooled categories raises concern. Each province has its own priorities and needs, thus the criteria of PN subcategories vary largely across provinces. According to the Auditor General of Canada, in 2009, PNPs have over 50 different subcategories. Take Manitoba, for example, other than the usual employer-initiated category and business category, one subcategory of the Manitoba program does not require the applicants to have a job offer, instead they must demonstrate their tie to Manitoba, such as friends or relatives. There is no clear federal comparison group for it: should Family Sponsored Class immigrants be included in the comparison together with other economic class immigrants? Also, without detailed composition of each subcategory, it is hard to attribute any earning difference to a certain subgroup of PNs, or to single out the impact of certain selection criteria.

To reduce the complication created by multiple sub-categories, this paper focuses on the comparison of employment earnings between BC Provincial Nominees (BC PNs) and Federal Skilled Workers (FSWs) landed and stayed in BC.

British Columbia's PNP (BC PNP) is one of the first and largest nominee programs in Canada. Between 2005 and 2009, British Columbia's PNs accounted for about 15% of the total PNs, only second to Manitoba's program which accounted for 40% of total PNs during this period[5]. Because British Columbia is traditionally one of the largest destinations of immigrants, the goal of BC PNP is not simply to attract more immigrants, but to attract those who can contribute to the in-demand industries. Compared to FSWs, the selection criteria of BC PNP are more stringent (applicants must have a job offer). At the same time, a shorter processing time is very appealing to those who qualify for both PNP and FSW program.

Immigration selection under PNPs is decentralized at the province level. In the case of the BC PNP, immigrants are essentially selected by employers and therefore the selection process is even more decentralized. Thus, the comparison between FSWs and BC PNs is not only a comparison of immigration programs with a long-term goal and the other with short-term demand, but also a comparison of economic outcomes between centralized system and decentralized structure.

Using the Longitudinal Immigrant Database (IMDB), this paper finds that the earnings of BC PNs are much higher than that of FSWs. One year after landing, without any controls for personal characteristics, the mean employment earning of BC PNs is 3 times that of FSWs'. Such advantage declines with their stay in Canada, but remains significant. After 4 years in Canada, BC PNs still earn twice as much as FSWs.

Compared to FSWs, BC PNs are less likely to have post-secondary education, more likely to speak the official language, and more likely to come from

5 Data source: Citizenship and Immigration Canada

English-speaking developed countries (namely the UK, US, and Australia). These differences in observed characteristics can explain part of the earnings gap but far from all of it.

With flexible empirical specification and Oxaca-Blinder decomposition, this paper shows that higher return to education and higher return to official language ability for PNs are the main contributors to the earnings gap. In another words, unlike FSWs or immigrants in general who suffer from lower return to human capital in Canadian labour market (Ferrer and Riddell 2008; Skuterud and Su 2008), a PNs' education and language ability are more appropriately rewarded.

The findings lead to a further question: why do PNs have a higher return to language and education? This paper proposes three possible explanations: Canadian experience, job-offer requirement, and possible "cream skimming". Unfortunately, direct testing is not possible with available data. Nevertheless, supporting evidence is provided for all three explanations:

1. Data from Citizenship and Immigration Canada suggests that more than 70% of BC PNs have previously worked or studied in Canada, while less than 20% of FSWs have. Higher return to education and experience for PNs could be reflecting the higher return to human capital that are obtained in Canada.

2. Including unemployment rate as an additional control (Aydemir and Skuterud, 2005; Green and Worswick 2004; McDonald and Worswick, 1998), this paper finds that BC PNs are not significantly affected by macroeconomic conditions. This is likely to be the result of the job offer requirement for PNs. A pre-arranged job can help immigrants establish

in Canada faster and protect them from a bad labour market, therefore contributing to their earning advantage.

3. Based on the federal point system, I assign a "Pseudo Point" to each immigrant according to his or her observed individual characteristics. The distribution of Pseudo Points is very similar for BC PNs and FSWs, which indicates that the majority of BC PNs would have passed the required 67-point threshold to qualify as FSWs. This distribution is consistent with the "cream skimming" story: the short processing time of the BC PNP attracts the most skilled immigrants that would have qualified both as a BC PN and FSW.

An important policy question surfaces with these findings: is the BC PNP so successful that the government should expand the PNP and move away from FSW program? We have to be cautious in making such a conclusion. Although involving employers in the immigration selection process is beneficial in terms of the employment earnings, the exact channel of such an earnings advantage is unclear. Also, the fact that a large proportion of BC PNs are from countries like the UK and US raises concern that the PNP might lead to employer discrimination based on country of origin. The country distribution might simply be coincidence, but studies have found that employers prefer immigrants from the UK and US to immigrants from China or India (Oreopoulos 2009). The question therefore becomes: what should be the goal of the immigration policy, better workers or diversified culture? The answer to such a question is beyond the scope of this paper.

The rest of this paper is organized as follows: Section 2 introduces the BC Provincial Nominee Program and IMDB and provides summary statistics; Section 3 presents the BC PNs' earning advantage and explores factors that

contribute to the earnings gap with flexible empirical specification and Oxaca-Blinder decomposition; in Section 4, I discuss the possible reasons for PNs' higher return to education and language. Construction and distribution of Pseudo Points are also presented in this section. Section 5 concludes and discusses policy implications.

2. Background and Summary Statistics

In Canada, immigration falls under the leadership of federal government. Citizenship and Immigration Canada (CIC) is the federal department chiefly responsible for immigrant selection. With the federal government, provinces and territories share responsibility and have signed agreements to create their own Provincial Nominee Program (PNP) according to their specific labour market needs. From the time when the *Canada-Manitoba Immigration Agreement* first signed in October 1996, 11 jurisdictions (Yukon Territory, Northwest Territories, and all provinces except Quebec[6]) have signed similar agreements (CIC 2010).

2.1 British Columbia Provincial Nominee Program

British Columbia signed the agreement in May 1998 and launched its Provincial Nominee Program (BC PNP) in March 2001. The program was first introduced to attract foreign-trained nurses. Later on, it expanded the scope and added more sub-categories (See Table 1). Currently, the BC PNP has two main sub-streams (Strategic Occupation stream and Business stream) and eight sub-categories.

6 The *Canada-Quebec Accord on Immigration* (1991) gives Quebec the authority to set its own immigration requirements and to select immigrants who will adapt well in Quebec.

Similar to federal economic class (Business Class, Federal Skilled Workers, and the newly added Canadian Experience Class), the BC PNP selects immigrants that are more likely to be economically established and that are more likely to contribute to the local market. For example, both the BC PNP Skilled Worker and Federal Skilled Worker (FSW) classes accept all occupations with Skill Level 0 (managerial occupations), Skill Level A (professional occupations), or B (technical occupations and skilled trades) on the Canadian National Occupational Classification (NOC) list.

Some distinct features of the BC PNP complement instead of substitute the federal program. The BC PNP Skilled Worker category is completely employer driven. Applicants must have a job offer of indeterminate employment from an eligible BC employer, while FSW applicants can qualify if they have one full year of work experience in a related field. In this sense, the requirement of a BC PNP Skilled Worker is more stringent. On the other hand, FSW must obtain 67 points according to the CIC's point system, while BC PNP Skilled Workers do not have a minimum point requirement.

The processing time also varies. At the end of December 2008, the average processing time for FSWs was 63 months (Auditor General of Canada 2009), and the number of backlog cases has been large[7]. Over the period from 2005 to 2010, the average processing time for the BC PNP was 10 weeks (BC Ministry of Jobs, Tourism and Innovation 2011). For those who qualify for both the FSW and BC PNP, the much shorter processing time of the BC PNP is a big attraction.

7 http://www.cic.gc.ca/english/resources/statistics/data-release/2011-Q1/index.asp, accessed at Sep 24, 2011.

2.2 IMDB

This study uses the Longitudinal Immigration Database (IMDB), an administrative database managed by Statistics Canada. It links immigrants' landing records with subsequent tax information. The database covers all the immigrants landed between 1980 and 2008 who filed at least one tax return in this time frame. The landing record provides information about immigrant class and personal characteristics such as gender, date of birth, education, skill level, etc. The tax files are obtained from Canada Revenue Agency and include all of the income information that appears in the personal tax return T1 form.

There are several advantages of using IMDB for this study. First, the detailed landing information enables the comparison between different immigrant classes. Second, because PNP is relatively new, the population is small, despite the fact that it has been expanding since 2005. IMDB covers a large portion of all the PNs, which makes statistical analysis meaningful.

However, there are some drawbacks of using IMDB. As mentioned by Green and Worswick (2004), the IMDB does not have information on immigrant education upgrading after landing in Canada. It also does not provide information on immigrant status prior to landing. Moreover, although all applications are checked and evaluated by immigration officers, information on the landing records is self-reported. Variables like official language and intended occupation do not accurately reflect their actual language ability or the occupation they take after landing. Another limitation of IMDB is the lack of a comparable database for natives. Therefore, this study can only focus on the comparison between different classes of immigrants, rather than between immigrants and natives.

IMDB has the longitudinal feature. However, due to the fact that Provincial Nominee Programs were small when it was first introduced, this paper only explores the cross-sectional variation. The outcome variables are annual income one year since landing, annual income two years since landing, etc.

2.3 Comparison Group

I restricted the sample of principal applicants of PNs and FSWs that landed in British Columbia between 2002 and 2008 and of age 20 to 60. I excluded the observation has annual employment income less than $1,000[8]. There are two reasons for this restriction. First, it is to keep this study consistent with the internal evaluation carried out by Citizenship and Immigration Canada. Second, it is a way to exclude the Business sub-category from BC PNs.

To see this second point, note that the key question here is which class of immigrants should be used as the comparison group of BC PNs. From the sub-categories listed in Table 1, it seems that Federal Skilled Workers and Federal Business Class should be included as the comparison groups. In fact, Pandey and Townsend (2010) pool together FSWs and Business class and define them as Economic Class Immigrants (ECI), and use ECI as the comparison group in their study.

According to the BC Ministry of Jobs, Tourism and Innovation, from 2001 to 2010 less than 5% of the BC PNs applied through the Business stream. Among all the Strategic Occupation applicants, the majority of the applicants, 7,793 out of a total 9,963, applied as BC PNP Skilled Workers, while the rest applied as BC PNP Entry-level Semi-skilled Workers or International Graduates[9]. Unfortunately, IMDB does not allow me to identify the sub-categories of PNP.

8 All the employment income is in 2002 dollar value adjusted by CPI.
9 Data source: BC Ministry of Jobs, Tourism and Innovation

Table 2 shows the percentage of each economic class of immigrants that reported annual employment earnings greater than $1,000. Because most business class immigrants have income in the form of self-employment or investment, only about 42% of Federal Business Class immigrants have more than $1,000 employment earnings after one year since landing. In comparison, 75% of FSWs and 85% of PNs reported employments earning that are greater than $1,000. If we assume that the income source composition is similar between Federal Business Class immigrants and Business nominees, restricting the outcome variable to employment income instead of total income would greatly limit the BC PN sample to those applied through Strategic Occupation stream. Therefore, FSWs is the most suitable comparison group.

2.4 Earning Profile

Table 3 and Figure 1 depict the mean earning profiles of BC PNs and BC FSWs. The earnings advantage of BC PNs compared to BC FSWs is surprisingly large. Take the 2003 cohort, for example. After one year since landing, the employment earnings of PNs is $62,400, almost 3 times as large as that of FSWs' at $21,900. Although the earning of FSWs grows faster than PNs (about 15% per year, compared to PNs rate 2.5% per year), after 5 years since landing, PNs still earn about twice as much as FSWs.

Such an earnings advantage is not unique to a single cohort. The magnitude of mean earnings advantages is the same for all PNs landed between 2002 and 2007. Note that the comparison is restricted to those who reported tax and have employment earning that is greater than $1,000. If we take into account the fact that more PNs than FSWs have reported employment earning greater than $1,000, the mean earning advantage of all PNs would be even larger than all FSWs.

Although it is too early to know if FSWs can eventually catch up with PNs in the long run, it is still possible to draw some reference using FSWs from an earlier cohort. For example, after 14 years since landing, the average employment earnings of 1990 cohort FSWs is $45,300. After 12 years since landing, the average employment earning of 1995 cohort FSWs is $45,800. None of these earlier cohorts were able to reach the high level of average earnings achieved by PNs.

Yet, we must recognize the recent changes in Canadian immigration policy. In 2002, the *Immigration and Refugee Protection Act* (IRPA) replaced the *Immigration Act* of 1976. One of the biggest changes is the point system, and the resulting change in the characteristics and quality of FSWs (Begin, Goyette, and Riddell, 2011). It is very possible that in the long run, recent FSWs can catch up in the labour market much faster than the earlier FSWs. Nevertheless, the PNs' earning advantage in the short run is so large that understanding the possible reasons behind this gap is very important. Only after understanding the factors that contribute to the earnings advantage can we make the right policy to attract immigrants that are most suitable for the local economy and design and provide settlement service for them.

2.5 Demographic Characteristics of BC PNs compared to FSWs

Although both FSWs and PNs are selected based on skills, different selection criteria attract immigrants with different characteristics. The earnings difference might simply be the result of the distribution of observable characteristics. Table 4 provides a profile of the personal characteristics of each group of immigrants.

Federal selection criteria put more emphasis on long-term establishment and therefore on general human capital. Provinces, on the other hand, want

immigrants that are more suitable for the regional economic development. Such diverse views are shown in the distribution of education level between FSWs and PNs. There are about 86% of FSWs that have a bachelor or graduate level education, whereas only about 62% of PNs have post-secondary education. 31% of PNs reported having an education level of "high school or more", while only 12% of FSWs do. "High school or more" education level included those who have trade certificates and non-university diplomas. The large proportion of PNs with this level of education suggests that the BC PNP has successfully attracted professional workers through the Entry-Level or Semi-Skilled sub-category[10] (Ministry of Jobs Tourism and Innovation, 2011).

Foreign Experience is constructed using the following formula:

Foreign experience = Age at landing - Year of schooling - 6.

The majority of both groups have less than 20 years of foreign experience. PNs have relatively fewer years of foreign experience compared to FSWs. The distribution of foreign experience partly reflected the distribution of age at landing, which suggests that PNs are on average slightly younger than FSWs.

Even though the language ability variable is self-reported and is not an accurate measure of the fluency, this measure still reflects the difference in official language ability between these two groups. About 93% of PNs reported the ability to speak English, French, or both languages, whereas only 74% of FSWs did so. The difference in the proportion of people able to speak the official language is likely to be the result of the source country composition. Most of the BC FSWs come from China and other Asian Countries, with fewer

10 From 2005 to 2010, there are 1254 BC PNs applied through Entry-Level Semi-Skilled sub-category, 916 through International Graduates sub-category, and 7793 through the Skilled Workers sub-category. Occupations under these subcategories include long haul truck drivers, tourist and food industry workers, etc. Source: BC Ministry of Jobs, Tourism and Innovation.

coming from English-speaking countries. In contrast, there are about 30% of BC PNs that come from the United Kingdom or the United States. The proportion of PNs that come from other European countries is also larger than the proportion of FSWs.

The demographic difference accounts for part of the PNs' earning advantage, as will be demonstrated in the following section.

3. BC PNs' Employment Earning Advantage

3.1 Methods and Specification

In this section, I explore the factors that contribute to the PNs' earning advantage. The specification is as following:

$$\ln Earning = \alpha_0 + \alpha_1 PN + \alpha_2 X + \sum_{t=2003}^{2007} \beta_t C_t + \varepsilon \qquad (1)$$

Where *PN* is a dummy variable that equals 1 if the immigrant is a Provincial Nominee, 0 if a Federal Skilled Worker. *X* is a vector of personal characteristics such as education, foreign experience, knowledge of official language, etc. $\{C_t\}_{t=2003}^{2007}$ is a set of dummies indicating the year of landing. The coefficient α_1 captures the earnings difference between PNs and FSWs.

This specification assumes that the impact of the explanatory variables is the same for both PNs and FSWs. It might not be true. To separate the composition effect from the wage structure (i.e. to allow the return to observed characteristics differ by group), I use Oxaca-Blinder decomposition method. Regressions using specification (1) are run for PNs and FSWs separately.

3.2 Earnings Advantage

Table 5 first shows the raw difference of the log employment earnings between PNs and FSWs. Column (1) to column (4) uses earnings in different years since landing as the outcome variable. Although the earnings after 5 years since landing and 6 years since landing are available, I excluded them in the analysis due to their small sample size.

The first panel shows the raw log difference of employment earnings. The pattern is similar to that in Figure 1, except that in regression analysis, the average is taken over all 6 cohorts that landed between 2002 and 2007. After one year since landing, without taking into account any of the observed characteristics, the employment earnings of PNs are 1.003 log points higher than that of FSWs, which translates to a percentage of 172% higher. The coefficient gets smaller as we move to later columns. After 4 years since landing, the employment earnings of PNs are about 0.725 log points higher than FSWs, which translates to a percentage of 100% higher.

As documented in the literature (Aydemir and Skuterud 2005), the entry earnings of immigrants to Canada have been deteriorating since the 1980s. To take into account the cohort quality and the year varying factors, the second panel of Table 5 adds in the cohort dummies that indicate the year of landing. The omitted group is the 2002 landing cohort.

The coefficients of later cohorts are higher than the earlier cohorts, suggesting that the deteriorating pattern does not hold for immigrants landed between 2002 and 2007, at least not for Federal Skilled Workers and Provincial Nominees. After one year since landing, the immigrants landed in 2007 earn about 30% more than those landed in 2002. The 2006 cohort earns about 24% more than the 2002 cohort. This improving trend is likely to be the result

of the recent policy change. Begin, Goyette, and Riddell (2011) find that FSWs selected under the new IRPA regime do better than FSWs selected under the pre-IRPA regime. In fact, regressions run on FSWs and PNs separately (presented in the next sub-section) suggest that this improving trend mainly emerges within FSWs, which is consistent with the IRPA effect.

The estimation results using specification (1) are presented in Table 6. The assumption of this set of estimation is that the impact of explanatory variables on log earnings is the same for both FSWs and PNs. The omitted groups are male unmarried FSWs landed in 2002, from European countries other than UK, with less than high school education, with less than 10 years foreign experience, who cannot speak either English or French, whose skill level is B, C, or D, and who did not receive unemployment benefit in the previous year. After controlling for observable characteristics, the one-year earning advantage of PNs dropped to 0.594 log points from the previous 0.899 log points. The point estimates suggest that even after controlling for observable characteristics, BC PNs still earn about 80% more than FSWs one year after migration. The four-year earnings advantage of PNs dropped to 0.503 log points (65% higher than FSWs in level), which is still substantial.

Most of the coefficients shown in Table 6 agree with the empirical evidence found in the literature. Some unique patterns appear for these two groups of immigrants that require further discussion:

First, there is no obvious return to education for both groups of immigrants one year after landing. Although the coefficients of education dummies get bigger as the education level gets higher, they are not significant in the first column. The return to education appears after two years since landing. Immigrants with graduate level education earn about 17% higher (0.162 log

points) than those who have high school level or less education after two years, and 29% higher (0.252 log points) after three years since landing. This pattern suggests that employers do not immediately recognize higher education of immigrants, but education pays off in the long run.

Second, the literature (for example Aydemir and Skuterud 2005) has found that the return to foreign experience is lower than the return to experience obtained in Canada. Estimation results in Table 6 show that for Skilled Workers and PNs, there is even penalty for higher foreign experience. The average earning of those immigrants who have more than 30 years of foreign experience is 0.232 log points lower than those who have less than 10 years of foreign experience, which translates to almost a 30% earning penalty. Those who have worked 20 to 30 years abroad earn about 20% less than those who worked less than 10 years. Even those who have 10 to 20 years of foreign experience suffer a 10% earning penalty compared to their less experienced counterparts. Because of the construction of the foreign experience variable, the earnings penalty of foreign experience reflects the labor market disadvantage faced by older immigrants[11].

Third, speaking the official language is a big bonus. After one year since landing, those who can speak English or French have earnings that are 22% (0.202 log points) higher than those who do not speak either English or French. Such a language bonus decreases with time spent in Canada: the return to speaking official language is 16.7% (0.155 log points) after two years, 11.8% (0.112 log points) after three years, and 9.4% (0.093 log points) after four years. Because the official language variable is self-reported at the time of landing, the decreasing return to language pattern could be the result of im-

11 Using age at landing in place of foreign experience in the regression yield similar conclusion: older immigrants have lower earnings compared to younger immigrants. This finding is consistent with Pandey and Townsend (2010).

migrants' language upgrading after migration: those who do not speak either of the official language at the time of landing leaned English or French as they stay in Canada, and benefit from the return to language later on.

Because of the small sample size of PNs, all of the analysis is done on both genders pooled together. Nevertheless, a gender dummy is added in the basic specification. On average, female immigrants earn around 30% less than male immigrants. Whether an immigrant is married or not does not affect the earnings. The dummy indicating whether an immigrant received unemployment benefits in the previous year is used as a control for the employment status, and there's a significant negative correlation between earning and the unemployment benefit receipt. The coefficients of country dummies show expected signs. Compare to European immigrants, immigrants from the UK, US, South Africa, and Australasia have a large earning advantage, while immigrants from African countries or Asian countries earn less.

3.3 Decomposition

Regression results in the previous section assume the wage structure is the same for both PNs and FSWs. However, it is possible that these two groups experience different return to human capital and other characteristics. Table 7 and Table 8 report the regression result of specification (1) estimated for each group separately.

For PNs, the return to education is very large starting from the first year since landing. PNs with a bachelor degree earn about 37% more (0.327 log points higher) than PNs with only high school level education or lower. The earnings of PNs with graduate level education are 0.574 log points higher than PNs with lower than high school level education one year since landing. The advantage remains high, at around 0.6 log points higher after 2 years since

landing. Lack of credential recognition does not seem to be a problem for PNs. In contrast, there is no return to education for FSWs within the first two years after landing.

Similarly, PNs do not suffer the penalty that comes with age, or foreign experience. The negative coefficient of foreign experience is mainly experienced my FSWs. The size of such a penalty is substantial and significant.

Consider the impact of country of origin. Although both groups of immigrants that are from the US, UK, South Africa, and Australia have an earning advantage over immigrants from other countries, such a country of origin advantage is much higher for FSWs.

Table 9 shows the Oxaca-Blinder decomposition results for employment earnings one and two years since landing. Whether we use PN's coefficients or FSW's coefficients, the composition effect accounts for a much smaller portion of the wage gap than the wage structure does. In another words, the employment earnings advantage of BC PNs over FSWs cannot be simply explained by the fact that there are more PNs that speak English, or that PNs are younger, or that there are more PNs from the US and UK. It is the different return to observed human capital variables that really contributes to the earnings advantage.

Take the decomposition result using a PN's coefficients as an example[12]. We ask, what if the return to observed characteristics has the same structure for FSWs as for PNs? How much of the wage difference can be explained by the

12 This means to decompose the earnings difference based on the following:

$$Y_{PN} - Y_{FSW} = X_{PN}\beta_{PN} - X_{FSW}\beta_{FSW}$$
$$= X_{PN}\beta_{PN} - X_{FSW}\beta_{PN} + X_{FSW}\beta_{PN} - X_{FSW}\beta_{FSW}$$
$$= (X_{PN} - X_{FSW})\beta_{PN} + X_{FSW}(\beta_{PN} - \beta_{FSW})$$

composition effect[13] ? The results suggest that only about 16% of the first year wage gap can be explained by the population composition, with the biggest contributor being official language ability and source country structure. On the other hand, how much of the wage gap is due to different "wage structure"[14] if we assume that the population of PNs has the same observable composition as the population of FSWs? The decomposition results in Table 9 show that the wage structure difference can explain almost the entire wage gap; and the key contributors are education, foreign experience, and language.

In plain language: the analysis and decomposition results suggest that the wage gap between BC PNs and FSWs is not simply due to the different population composition of these two groups. In fact, the fact that BC PNs have a better return to education, return to experience, and return to official language ability can explain the wage gap almost entirely.

4. Why a Higher Return?

The results in the previous sections naturally raise the following questions: why do PNs have a much higher return to their human capital variables than FSWs? Which of the selection criteria of the PNP is most likely to contribute to such results? I propose three explanations: Canadian experience, a job offer at hand, and possible "cream skimming". Unfortunately, available data is not sufficient to provide formal tests. This section presents some evidence that supports the proposed explanations.

13 For example, immigrants with higher education have more employment income. If the PN group has more highly educated people, the average earnings of PNs should be higher simply due to the population composition. This is referred to as a "composition effect".

14 Again, using education as an example, if both the PN and FSW group have the same education distribution (for example, 20% of high education, 80% of low education), but high-educated PNs are paid much more than high-educated FSWs, then the average earnings of PNs are higher than the average earnings of FSWs. This is referred to as "wage structure" in the decomposition exercise.

4.1 Canadian experience

Many studies (Ferrer and Riddell 2008; Skuterud and Su 2008) have found that the return to foreign education is much lower than the return to education obtained in Canada. Similarly, the return to foreign experience is much lower than the return to experience obtained in Canada. If it is true that most PNs have previously worked or studied in Canada, then it is possible that the higher return to education for PNs reflects the higher return to Canadian education and Canadian experience.

Unfortunately, the IMDB does not have any information on whether an immigrant previously stayed in Canada. To provide supporting evidence, I use the available observation in IMDB and the number provided by CIC Facts and Figures to calculate the percentage of each class of immigrants previously stayed in Canada. Figure 2 displays the percentage of BC immigrants' transition from temporary to permanent residence[15]. As shown in the figure, the proportion of PNs landed between 2002 and 2008 that have previously worked or studied in Canada is much higher than the proportion of FSWs landed in the same period. Since 2005, each year there are more than 70 percent of PNs transited from either student or temporary worker; while less than 25% of FSWs previously worked or studied in Canada.

Having stayed in Canada means that immigrants have more chances to acquire local market specific human capital, and they are more likely to develop relationships with a local employer. Employers also have the opportunity to know the actual ability of immigrants and to offer them jobs accordingly, as well as to sponsor and nominate them to immigrate.

15 One has to be cautious that the two data sources (IMDB and CIC Facts and Figures) do not usually provide the same count, but the magnitudes generally are the same.

4.2 Job Offer Requirement

Compared to FSWs selection criteria, one of the biggest differences is that all the BC PNs are required to have a job offer from an eligible employer in BC[16]. Although applicants for FSWs who have arranged employment can get up to 10 points according to the point system, it is not mandatory[17]. Federal skilled workers are selected based on their potential to get a job once they are landed, while provincial nominees are selected based on their established employment in BC. Again, it is not reported in the IMDB or any other publicly available database whether an immigrant has arranged employment, unfortunately. To get a sense of how important this job offer requirement is to employment earnings, I include the BC yearly unemployment rate in the regression[18]. The empirical specification is:

$$\ln Earning = \alpha_0 + \alpha_1 PN + \alpha_2 X + \alpha_3 unemp + \alpha_4 PN \cdot unemp + \varepsilon \qquad (2)$$

Column 1 and 2 in Table 10 use the unemployment rate at landing year as a control, while the unemployment rate at tax year is used in column 3 and 4. Coefficients on other variables remain similar and therefore are not reported.

Regressions in column 1 and column 3 assume that the macroeconomic condition has the same impact on both PNs and FSWs. Under this assumption, a 1 percentage higher unemployment rate at landing year corresponds to a 0.056 log point drop in employment earnings. In this case, the magnitude of the PN earnings advantage (α_1) is similar to the model using cohort dummies and basic controls.

16 The 3-year pilot project of the BC PNP for post-graduate students in natural, applied, and health sciences is the only exception. This project started in May 2010 and will end in May 2013. The time frame is outside of the scope of this paper.

17 Given that immigrants have arranged employment already, a shorter processing time would attract those potential FSWs to apply through the BC PNP. This point will be discussed more in the next subsection.

18 Due to perfect collinearity, I excluded the cohort dummies.

If we allow the impact of the unemployment rate to differ by PNs and FSWs, the PNs' earnings advantage drops dramatically: from 0.592 log point to only 0.166 log point. The coefficients of the unemployment rate suggest that PNs are not significantly impacted by unfavourable economic conditions, while the employment earnings of FSWs are very sensitive to the macroeconomic conditions.

The results are consistent with the job offer explanation. With arranged employment, immigrants do not suffer from underemployment during the transition period (Chiswick and Miller 2009; Chiswick and Miller 2005), and they are protected from economic fluctuations.

4.3 Cream Skimming and Pseudo Points

The Provincial Nominee program is designed with the provincial economic goal in mind. The targeted immigrant groups vary by provinces. For BC, a province that traditionally attracts a large number of immigrants, size is less a concern than quality. The BC PNP selection criteria aims to attract the most able immigrants and the most in-demand workers. In general, the BC PNP has a much shorter processing time than the FSW program. All else equal, this short processing time alone would result in higher average ability. Therefore, the higher return to human capital could be the return to unobserved ability, which results in higher average earnings of BC PNs.

Consider a very simple model. Assume the skill of immigrants is continuously and uniformly distributed on the interval (a_0, b_0). The FSW program selects immigrants with skill distribution on the interval (a_{FSW}, b_0) , while the PNP selects immigrants with skill distribution on the interval (a_{PN}, b_0) . Those immigrants qualify as both a FSW and a PNP therefore have skill distribution on the interval $(\max\{a_{FSW}, a_{PN}\}, b_0)$.

If the PN program attracts those qualifying as both a PN and an FSW, the average skill of PNs is therefore

$$\frac{1}{2}(\max\{a_{FSW}, a_{PN}\} + b_0)$$

which is greater than or equal to the average skill of FSWs

$$\frac{1}{2}(a_{FSW} + b_0)$$

To see if this is indeed the case, with certain assumptions, I assign a "pseudo point" to each immigrant according to the federal point system.

Among the 6 factors defining the points, education, experience, language, and age can be directly or indirectly observed in the IMDB. Points are assigned accordingly[19].

Figure 3 summarizes the distribution of the "Pseudo Points" across provinces for Federal Business Class Immigrants, Federal Skilled Workers, and Provincial Nominees. Box plots display the 25%, median, and 75% of the distribution. The end of whiskers represents the maximum and minimum value within the upper and lower fence. The horizontal line represents point 67, the passing requirement for FSWs. Because the pseudo points are created with assumptions, and the number of Business Class Immigrants and Provincial Nominees in provinces such as Saskatchewan and Alberta is small, Figure 3 should be interpreted with caution. It should be interpreted as a one-dimension way of summarizing the characteristics of immigrants.

19 Education points are assigned based on both an education level variable and years of schooling variable. Experience points are assigned using the formula: foreign experience = age at landing - years of schooling - 6. Language points are assigned based on the following: if speaks both languages, assume the first language with highest proficiency and the second at a basic level; if speaks only one language, assign highest proficiency (assume when applying, immigrants report in a way to get highest points). Arranged employment and adaptability are not available. I use a "work intention" variable as an approximate indicator of arranged employment. I assign adaptability points based on spouse's or common-law partner's education with educational assortative mating assumption (highly educated principal applicants have highly educated spouses).

The fact that Business Class Immigrants on average score very low and that majority of FSWs scored higher than 67 gives confidence in the quality of the "Pseudo Points". The variation of point distribution of Provincial Nominees reflects the various selection criteria across provinces. During the study period, from year 2002 to year 2008, the largest numbers of PNs occur in British Columbia and Manitoba. If we only compare the Pseudo Points of BC immigrants and Manitoba immigrants, the difference is apparent.

In Manitoba, Provincial Nominees accounted for around 50% of all the immigrants located there. Other than the usual employer-driven economic streams, one sub-category of the Manitoba PNP only requires applicants to establish their connection to the province. Such a connection could be relatives or friends. This criterion increases the variation of the Pseudo-Point for Manitoba PNs. On the other hand, BC Provincial Nominees are a more selected and homogeneous group of immigrants. The distribution of Pseudo-points for BC PNs is quite similar to FSWs.

One of the most important messages Figure 3 carries is that most of the BC PNs would have qualified as FSWs. The shorter processing time of the BC PNP attracts the would-be-FSWs into the provincial program. In this "cream skimming" sense, provincial programs selected the "best" of all the possible immigrant workers. Higher employment earnings for this group are therefore expected.

5. Conclusion

This paper documents the large employment earnings gap between BC Provincial Nominees and Federal Skilled Workers. The mean employment earning of BC PNs is 3 times higher than FSWs after 1 year since landing. Even after 4 years since landing, such an earnings advantage remains high.

Exploring the factors that contribute to such an earnings advantage, this paper finds that a higher return to education and official language for BC PNs are the key factors. This paper further investigates the possible reasons behind the different wage structures. Although detailed data and direct tests are lacking, evidence suggests that there are three possible reasons accounting for the higher return to human capital for BC PNs: previously studied or worked in Canada, the job offer requirement, and "cream-skimming".

Without further evidence and direct tests, the findings of this paper do not conclude that BC PNP is successful to such a degree that policy makers should move away from FSWs. Instead, the results suggest that better credential recognition is much needed. Fortunately, BC initiated the Skills Connect for Immigrants program in 2002. The goal of this program is to help immigrants find jobs and to transfer their foreign experience and credentials more smoothly into the Canadian labour market. The government should expand and improve this program.

For federal level immigration policy, this paper suggests that accepting immigrants with Canadian experience can greatly reduce the difficulty immigrants face during the transition period. The newly introduced Canadian Experience Class is designed for this purpose. The success of BC PNs in the Canadian Labour Market provides supporting evidence for the expansion of this category.

This paper also poses a concern. It is true that involving employers in the immigrant selection process, as the BC PNP does, can serve the purpose of better recognizing the human capital of immigrants. However selection, even discrimination, based on country of origin might arise. Employers might prefer immigrants from the United States or Australia and offer them a higher wage.

Giving the provincial government, and essentially employers, more power and responsibility to choose immigrants, Canada might be able to obtain better workers. However, would Canada still benefit from diversified culture brought in by immigrants?

Unfortunately, due to data limitation, this paper cannot answer a lot of interesting and important questions. Some questions can be answered in the future using the IMDB, when more years are available and using, for example, Canadian Experience Class as a comparison group to further understand the contribution of Canadian experience. Also, follow-up research can provide evidence regarding the longer-term economic outcome of PNs compared to FSWs, and therefore a better evaluation of each program.

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7. Tables and Figures

Table 1: BC PNP Sub-categories and Time of Establishment

Sub-categories	First Established	Requirement (brief)
Strategic Occupations Stream		
Skilled Workers	March 2001	Require an offer of indeterminate employment from an eligible BC employer
International Graduates	December 2002	Degree graduates in selected fields
Entry-Level and Semi-Skilled Pilot Project	February 2008	Lower-skilled occupations in the hospitality and tourism sector, long-haul trucking and food processing
International Post-graduates Pilot Project		
Designated Health Professionals		
Business Stream		
Business Category	September 2002	$400,000 investment, create at least 3 new jobs
Regional Business Category	September 2003	$200,000 investment, create at least 1 new jobs, outside Metro Vancouver
Strategic Projects Category		

Source: BC Ministry of Jobs, Tourism and Innovation

Table 2: Percentage Reported Employment Earning > $1,000, BC, Principal Applicants

	Federal Business	Federal Skilled Workers	Provincial Nominees
		YSL = 1	
2002	0.377	0.713	0.815
2003	0.397	0.711	0.872
2004	0.384	0.741	0.863
2005	0.458	0.759	0.841
2006	0.437	0.775	0.839
2007	0.449	0.791	0.896
		YSL = 2	
2002	0.409	0.735	0.817
2003	0.437	0.735	0.880
2004	0.410	0.758	0.874
2005	0.463	0.756	0.823
2006	0.478	0.778	0.816
		YSL = 3	
2002	0.436	0.751	0.833
2003	0.453	0.753	0.916
2004	0.436	0.768	0.837
2005	0.499	0.773	0.786
		YSL = 4	
2002	0.478	0.774	0.845
2003	0.449	0.776	0.878
2004	0.433	0.781	0.827
		YSL = 5	
2002	0.456	0.779	0.759
2003	0.473	0.784	0.878
		YSL = 6	
2002	0.434	0.778	0.769

Source: IMDB, author's calculation

Table 3: Mean Earning Profiles of BC FSWs and BC PNs

	Federal Skilled Workers			Provincial Nominees		
	Mean	STD	Nobs	Mean	STD	Nobs
Year of Landing = 2002						
YSL = 1	23,800	(23,600)	2630	50,200	(22,300)	50
YSL = 2	27,600	(24,600)	2675	48,000	(27,200)	45
YSL = 3	31,300	(26,500)	2775	48,300	(26,600)	45
YSL = 4	35,000	(26,900)	2750	51,500	(28,900)	45
YSL = 5	38,300	(28,600)	2665	55,800	(30,700)	40
YSL = 6	42,200	(30,600)	2570	57,700	(28,700)	35
Year of Landing = 2003						
YSL = 1	21,900	(21,400)	2800	62,400	(38,200)	110
YSL = 2	26,200	(24,000)	2915	62,600	(34,900)	105
YSL = 3	31,100	(26,400)	2930	65,700	(43,100)	110
YSL = 4	34,700	(27,700)	2915	67,900	(44,900)	105
YSL = 5	37,800	(28,100)	2840	68,800	(41,900)	100
Year of Landing = 2004						
YSL = 1	25,100	(24,800)	3155	68,700	(44,900)	175
YSL = 2	30,300	(27,200)	3210	72,100	(46,000)	170
YSL = 3	34,700	(29,600)	3190	69,700	(44,900)	160
YSL = 4	37,800	(30,400)	3180	71,900	(46,800)	150
Year of Landing = 2005						
YSL = 1	24,900	(24,200)	3750	59,800	(43,400)	185
YSL = 2	29,900	(25,700)	3790	65,100	(48,400)	180
YSL = 3	33,300	(27,400)	3860	72,400	(52,600)	170
Year of Landing = 2006						
YSL = 1	29,200	(26,700)	2765	62,500	(39,000)	430
YSL = 2	33,000	(28,300)	2820	66,100	(43,000)	405
Year of Landing = 2007						
YSL = 1	32,200	(28,900)	2515	62,000	(41,900)	750

Source: IMDB, author's calculation

Note: Due to confidentiality concerns, all the dollar values reported in this table are rounded to100, and the counts are rounded to the nearest 5.

Table 4: Summary Statistics, BC, 2002 - 2008

	Federal Skilled Workers	Provincial Nominees
Female	0.330	0.306
Education		
Less than High School	0.017	0.077
High School or More	0.118	0.307
Bachelor	0.564	0.379
Graduate	0.301	0.237
Foreign Experience		
Foreign Experience < 10 years	0.287	0.368
Foreign Experience 10-20 years	0.483	0.339
Foreign Experience 20-30 years	0.207	0.222
Foreign Experience 30-50 years	0.026	0.077
Official Language	0.743	0.928
Skill Level		
0	0.097	0.174
A	0.666	0.335
Married	0.681	0.562
Country of Last Permanent Residence		
Africa, except South Africa	0.013	0.009
America	0.028	0.023
Australasia	0.013	0.066
China	0.328	0.151
Europe, except UK	0.112	0.146
India	0.068	0.038
Other Asia	0.254	0.196
Philippines	0.092	0.034
South Africa	0.011	0.029
UK	0.049	0.199
US	0.028	0.108

Source: IMDB, author's calculation

Table 5 OLS, Raw Difference and With Cohort Controls

	YSL = 1	YSL = 2	YSL = 3	YSL = 4
	Raw Difference			
PN	1.003	0.891	0.795	0.725
	(0.024)**	(0.033)**	(0.043)**	(0.054)**
	Cohort Controls			
PN	0.899	0.847	0.784	0.716
	(0.025)**	(0.033)**	(0.043)**	(0.054)**
Year of landing 2003	-0.074	-0.064	0.016	-0.017
	(0.025)**	(0.025)**	(0.024)	(0.024)
Year of landing 2004	0.047	0.062	0.094	0.062
	(0.025)*	(0.025)**	(0.024)**	(0.024)**
Year of landing 2005	0.061	0.080	0.078	
	(0.024)**	(0.024)**	(0.023)**	
Year of landing 2006	0.213	0.168		
	(0.025)**	(0.025)**		
Year of landing 2007	0.285			
	(0.025)**			
R Square	0.096	0.050	0.027	0.021
Nobs	19315	16310	13240	9145

Standard errors are reported in parenthesis

*Significant at 10% level, ** Significant at 5% level

Table 6 OLS, With Basic Controls

	YSL = 1	YSL = 2	YSL = 3	YSL = 4
PN	0.594	0.548	0.502	0.503
	(0.024)**	(0.031)**	(0.041)**	(0.053)**
High School or More	0.001	0.121	0.164	0.173
	(0.051)	(0.065)*	(0.085)*	(0.108)
Bachelor	0.011	0.148	0.223	0.261
	(0.051)	(0.064)**	(0.084)**	(0.107)**
Graduate	0.046	0.162	0.252	0.292
	(0.052)	(0.065)**	(0.085)**	(0.108)**
Foreign Experience 10-20 years	-0.093	-0.115	-0.095	-0.102
	(0.016)**	(0.017)**	(0.019)**	(0.022)**
Foreign Experience 20-30 years	-0.177	-0.225	-0.181	-0.166
	(0.020)**	(0.022)**	(0.024)**	(0.029)**
Foreign Experience 30-50 years	-0.232	-0.251	-0.311	-0.395
	(0.048)**	(0.058)**	(0.073)**	(0.096)**
Official Language	0.202	0.155	0.112	0.093
	(0.020)**	(0.020)**	(0.021)**	(0.024)**
Skill 0	0.101	0.065	0.054	-0.007
	(0.025)**	(0.027)**	(0.031)*	(0.043)
Skill A	0.033	0.016	0.023	0.044
	(0.016)**	(0.018)	(0.020)	(0.024)*
Female	-0.292	-0.295	-0.271	-0.249
	(0.014)**	(0.015)**	(0.016)**	(0.020)**
Married	-0.020	0.022	0.005	0.010
	(0.015)	(0.016)	(0.018)	(0.022)
Unemployment Benefit (t-1)	-0.035	-0.263	-0.199	-0.240
	(0.058)	(0.028)**	(0.024)**	(0.029)**
UK	0.499	0.448	0.314	0.335
	(0.031)**	(0.035)**	(0.040)**	(0.048)**
South Africa	0.600	0.592	0.515	0.518
	(0.054)**	(0.058)**	(0.063)**	(0.073)**
Other African Countries	-0.068	-0.030	-0.085	0.034
	(0.052)	(0.055)	(0.064)	(0.076)
China	-0.564	-0.594	-0.636	-0.532
	(0.024)**	(0.025)**	(0.028)**	(0.033)**
India	-0.190	-0.169	-0.233	-0.182
	(0.029)**	(0.032)**	(0.036)**	(0.046)**
Philippines	0.045	0.028	-0.024	-0.025
	(0.027)*	(0.029)	(0.032)	(0.040)

Table 6 OLS, With Basic Controls (continued)

	YSL = 1	YSL = 2	YSL = 3	YSL = 4
Other Asian Countries	-0.296	-0.313	-0.399	-0.374
	(0.023)**	(0.024)**	(0.027)**	(0.032)**
Australasia	0.501	0.367	0.249	0.304
	(0.050)**	(0.056)**	(0.062)**	(0.077)**
US	0.556	0.486	0.311	0.379
	(0.040)**	(0.048)**	(0.057)**	(0.075)**
America	0.116	0.145	0.103	0.101
	(0.040)**	(0.042)**	(0.046)**	(0.054)*
Year of landing 2003	0.082	0.035	0.107	0.056
	(0.025)**	(0.023)	(0.022)**	(0.023)**
Year of landing 2004	0.163	0.127	0.151	0.096
	(0.023)**	(0.022)**	(0.022)**	(0.022)**
Year of landing 2005	0.192	0.158	0.147	
	(0.022)**	(0.022)**	(0.021)**	
Year of landing 2006	0.269	0.194		
	(0.023)**	(0.023)**		
Year of landing 2007	0.268			
	(0.024)**			
Intercept	9.795	9.964	10.106	10.173
	(0.060)**	(0.072)**	(0.091)**	(0.113)**
R Square	0.274	0.227	0.194	0.159
Nobs	17190	15640	12830	9020

Standard errors are reported in parenthesis

*Significant at 10% level, ** Significant at 5% level

Table 7: Regression Coefficients and Means of Explanatory Variables, BC PNs and FSWs, 1 Year since Landing

	β_{PN}	$Std.Err._{PN}$	X_{PN}	β_{FSW}	$Std.Err._{FSW}$	X_{FSW}
High School or More	0.165	(0.091)*	0.275	-0.061	(0.060)	0.128
Bachelor	0.327	(0.093)**	0.388	-0.081	(0.059)	0.590
Graduate	0.574	(0.096)**	0.284	-0.069	(0.060)	0.265
Foreign Experience 10-20 years	0.094	(0.047)**	0.332	-0.103	(0.017)**	0.483
Foreign Experience 20-30 years	-0.040	(0.059)	0.197	-0.186	(0.022)**	0.207
Foreign Experience 30-50 years	-0.005	(0.092)	0.056	-0.272	(0.054)**	0.021
Speak Official Language	0.627	(0.105)**	0.959	0.181	(0.020)**	0.756
Skill Level 0	-0.151	(0.064)**	0.113	0.133	(0.027)**	0.087
Skill Level A	0.233	(0.044)**	0.341	0.021	(0.017)	0.644
UK	0.120	(0.066)*	0.209	0.560	(0.036)**	0.053
South Africa	0.141	(0.108)	0.037	0.652	(0.061)**	0.013
Africa and other countries	-0.094	(0.185)	0.010	-0.068	(0.054)	0.018
China	-0.494	(0.079)**	0.113	-0.552	(0.025)**	0.302
India	-0.247	(0.103)**	0.041	-0.179	(0.030)**	0.083
Philippines	0.066	(0.125)	0.026	0.054	(0.028)*	0.128
Asia	-0.446	(0.066)**	0.198	-0.275	(0.024)**	0.204
Australasia	0.204	(0.081)**	0.084	0.542	(0.063)**	0.013
US	0.240	(0.074)**	0.117	0.584	(0.047)**	0.025
America	-0.141	(0.120)	0.028	0.138	(0.042)**	0.032
Married	0.051	(0.043)	0.543	-0.014	(0.016)	0.671
Female	-0.081	(0.042)*	0.316	-0.315	(0.015)**	0.320
Unemployment Benefit (t-1)	-0.430	(0.113)**	0.027	0.039	(0.065)	0.011
Year of Landing 2003	0.228	(0.144)	0.052	0.073	(0.025)**	0.137
Year of Landing 2004	0.243	(0.134)*	0.102	0.156	(0.023)**	0.185
Year of Landing 2005	0.105	(0.134)	0.111	0.196	(0.023)**	0.221
Year of Landing 2006	0.176	(0.127)	0.263	0.271	(0.024)**	0.159
Year of Landing 2007	0.116	(0.124)	0.449	0.286	(0.025)**	0.145
Unadjusted Mean: Log Employment Earning	10.780			9.785		
R^2	0.303			0.210		
Nobs	1570			15620		

*Significant at 10% level, ** Significant at 5% level

Table 8: Regression Coefficients and Means of Explanatory Variables, BC PNs and FSWs, 2 Year since Landing

	β_{PN}	$Std.Err._{PN}$	X_{PN}	β_{FSW}	$Std.Err._{FSW}$	X_{FSW}
High School or More	0.194	(0.135)	0.28	0.081	(0.072)	0.128
Bachelor	0.384	(0.138)**	0.38	0.088	(0.072)	0.602
Graduate	0.602	(0.141)**	0.29	0.088	(0.073)	0.260
Foreign Experience 10-20 years	0.080	(0.068)	0.36	-0.120	(0.018)**	0.492
Foreign Experience 20-30 years	-0.137	(0.081)*	0.22	-0.225	(0.022)**	0.206
Foreign Experience 30-50 years	-0.059	(0.148)	0.05	-0.249	(0.062)**	0.015
Speak Official Language	0.608	(0.137)**	0.95	0.142	(0.020)**	0.732
Skill Level 0	-0.445	(0.096)**	0.11	0.108	(0.029)**	0.081
Skill Level A	0.034	(0.067)	0.28	0.025	(0.018)	0.665
UK	0.231	(0.097)**	0.19	0.468	(0.038)**	0.050
South Africa	-0.026	(0.153)	0.04	0.665	(0.062)**	0.014
Africa and other countries	-0.007	(0.252)	0.01	-0.040	(0.057)	0.017
China	-0.360	(0.121)**	0.10	-0.594	(0.026)**	0.319
India	-0.059	(0.142)	0.05	-0.168	(0.032)**	0.075
Philippines	0.056	(0.170)	0.03	0.030	(0.030)	0.118
Asia	-0.345	(0.094)**	0.24	-0.305	(0.025)**	0.213
Australasia	0.236	(0.115)**	0.10	0.361	(0.066)**	0.012
US	0.249	(0.113)**	0.09	0.494	(0.053)**	0.021
America	0.048	(0.176)	0.03	0.148	(0.043)**	0.033
Married	0.114	(0.061)*	0.56	0.023	(0.017)	0.680
Female	-0.164	(0.061)**	0.34	-0.302	(0.015)**	0.320
Unemployment Benefit (t-1)	-0.492	(0.106)**	0.07	-0.249	(0.029)**	0.062
Year of Landing 2003	0.134	(0.139)	0.12	0.027	(0.023)	0.187
Year of Landing 2004	0.144	(0.134)	0.19	0.119	(0.023)**	0.209
Year of Landing 2005	-0.014	(0.135)	0.20	0.160	(0.022)**	0.246
Year of Landing 2006	0.049	(0.127)	0.45	0.198	(0.024)**	0.183
Unadjusted Mean: Log Employment Earning		10.796			9.929	
R^2		0.302			0.192	
Nobs		870			14770	

*Significant at 10% level, ** Significant at 5% level

Table 9: Decomposition of Wage Difference

	Using PN's Coefficients		Using FSW's Coefficients	
	Composition Effect	Wage Structure	Composition Effect	Wage Structure
1 Year Since Landing				
Log Wage Gap Attributable to				
Education	-0.031	0.440	0.006	0.403
Foreign Experience	-0.014	0.131	0.008	0.109
Language	0.127	0.337	0.037	0.427
Skill	-0.074	0.111	-0.003	0.040
Source Country	0.160	-0.074	0.303	-0.217
Years of Landing	0.003	-0.022	0.074	-0.094
Other Observables	-0.013	0.113	0.004	0.096
Unadjusted Log Wage Gap	0.995	0.995	0.995	0.995
Total Explained by Model	0.157	1.037	0.429	0.765
Unexplained Log Wage Gap	0.838	-0.042	0.566	0.230
Two Years Since Landing				
Log Wage Gap Attributable to				
Education	-0.038	0.326	-0.005	0.293
Foreign Experience	-0.015	0.119	0.004	0.101
Language	0.133	0.341	0.031	0.443
Skill	-0.026	-0.039	-0.007	-0.058
Source Country	0.136	0.046	0.272	-0.090
Years of Landing	0.002	-0.045	0.042	-0.084
Other Observables	-0.021	0.091	-0.011	0.081
Unadjusted Log Wage Gap	0.867	0.867	0.867	0.867
Total Explained by Model	0.171	0.840	0.326	0.685
Unexplained Log Wage Gap	0.695	0.027	0.541	0.182

Source: calculated using Table 7 and Table 8

Table 10 OLS Result with Unemployment Rate

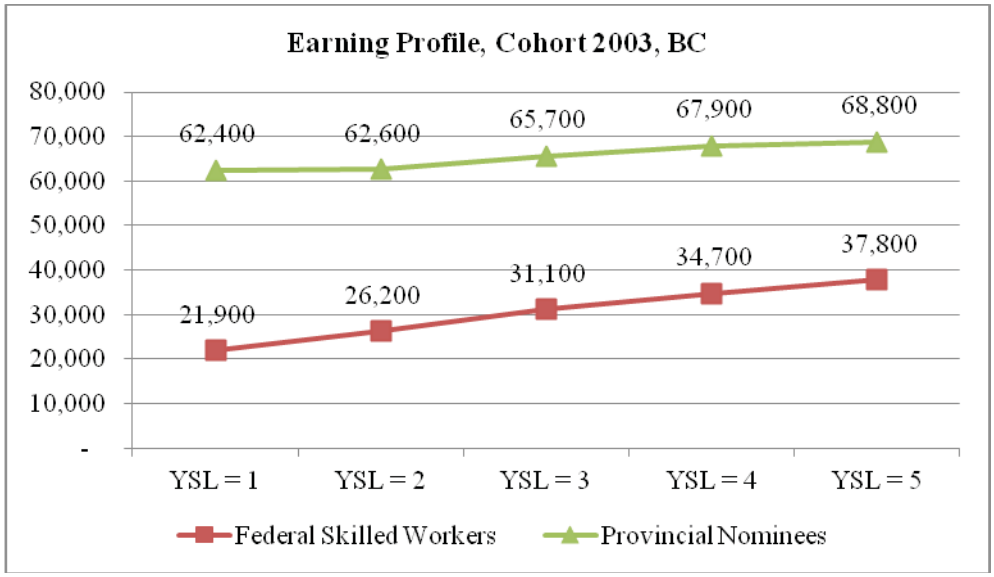
	Unemployment Rate at Landing		Unemployment at Tax Year	
	YSL = 1	YSL = 1	YSL = 1	YSL = 1
PN	0.592	0.166	0.609	0.177
	(0.024)**	(0.096)*	(0.024)**	(0.130)
Unemployment Rate	-0.056	-0.062	-0.063	-0.067
	(0.004)**	(0.005)**	(0.005)**	(0.005)**
PN * Unemployment Rate		0.077		0.082
		(0.017)**		(0.024)**
R^2	0.274	0.274	0.274	0.274
Nobs	17190	17190	17190	17190

Standard errors are reported in parenthesis

*Significant at 10% level, ** Significant at 5% level

Controls of other variables are not reported. Variables included in these regressions are education, foreign experience, language, gender, skill level, country of origin, marital status, lagged unemployment benefit.

Figure 1: Earning Profile of BC PNs and BC FSWs, Cohort 2003 and 2004



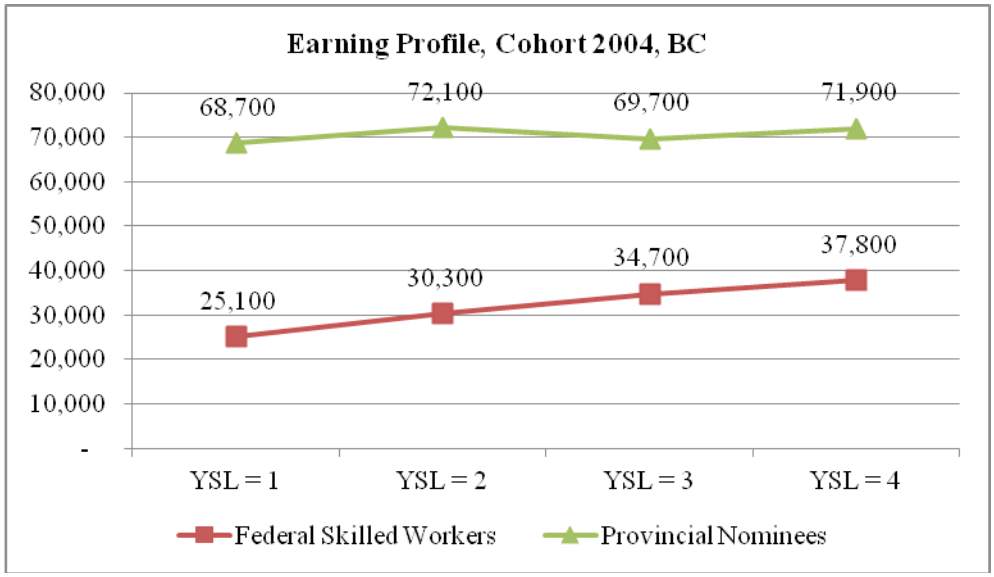


FIGURE 2: PERCENTAGE OF BC ECONOMIC CLASS IMMIGRANT TRANSITION FROM TEMPORARY TO PERMANENT RESIDENCE

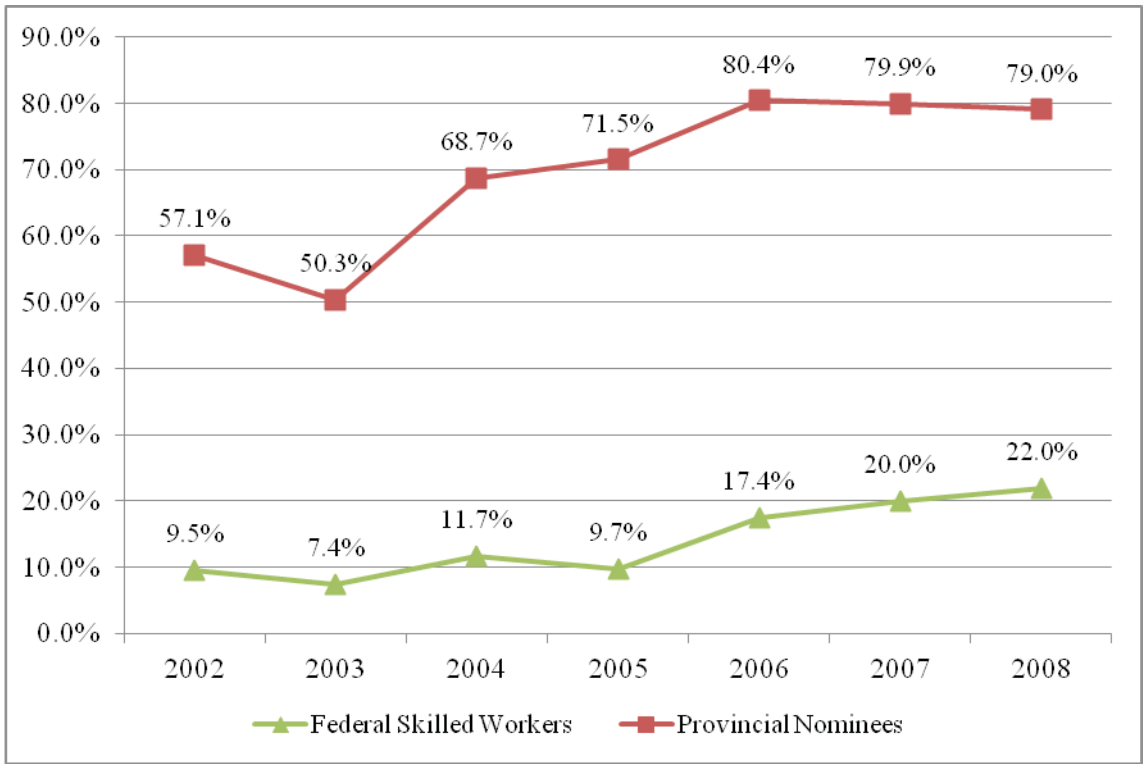
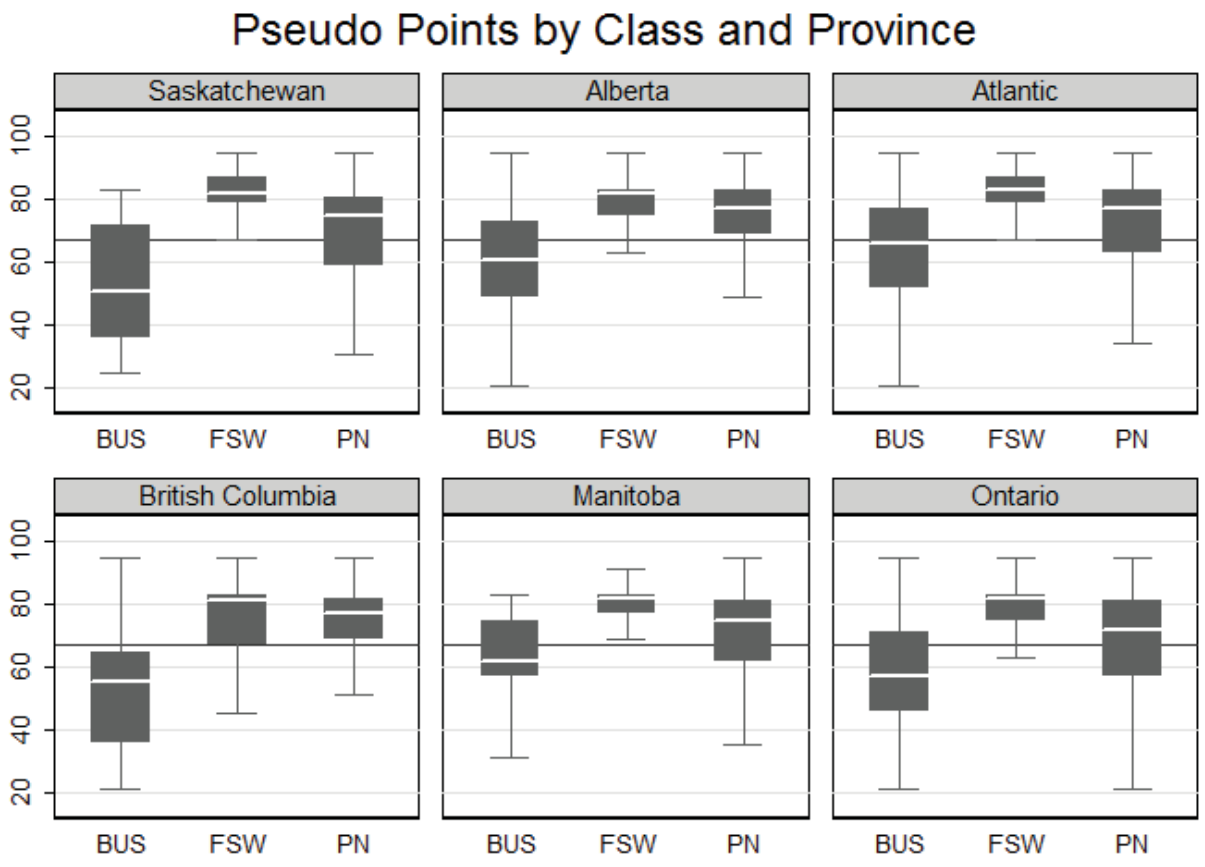


FIGURE 3: PSEUDO POINTS BY CLASS AND PROVINCE, 2002 – 2008 LANDING YEAR



Data source: IMDB, author's calculation

Appendix Table 1: Federal Skilled Worker Point Scheme

Level of Education	Up to 25 Points
University Degrees	
PhD, or Master's, AND at least 17 years of full-time or full-time equivalent study	25 points
Two or more university degrees at the Bachelor's level AND at least 15 years of full-time or full-time equivalent study	22 points
A two-year university degree at the Bachelor's level AND at least 14 years of full-time or full-time equivalent study	20 points
A one-year university degree at the Bachelor's level AND at least 13 years of full-time or full-time equivalent study	15 points
Trade or Non-university Certificate or Diploma	
A three-year diploma, trade certificate or apprenticeship AND at least 15 years of full-time or full-time equivalent study	22 points
A two-year diploma, trade certificate or apprenticeship AND at least 14 years of full-time or full-time equivalent study	20 points
A one-year diploma, trade certificate or apprenticeship AND at least 13 years of full-time or full-time equivalent study	15 points
A one-year diploma, trade certificate or apprenticeship AND at least 12 years of full-time or full-time equivalent study	12 points
Secondary School Educational Credential	5 points
Proficiency	**Up to 24 Points**
1st Language	
(English or French) High proficiency (per ability*)	4 points
Moderate proficiency (per ability*)	2 points
Basic proficiency (per ability*)	1-2 points
No proficiency (per ability*)	0
Maximum	16 points
2nd Language	
(English or French) High proficiency (per ability*)	2 points
Moderate proficiency (per ability*)	2 points
Basic proficiency (per ability*)	1-2 points
No proficiency (per ability*)	0
Maximum	8 points
* Listening, reading, speaking, writing	
Experience	**Up to 21 Points**
Four years or more	21 points
Three years	19 points
Two years or more	17 points
One year	15 points

Appendix Table 2: Pseudo Points, 2002 - 2008

	AB	Atlantic	BC	MB	ON	SK
			Federal Skilled Workers			
Mean	78.1	80.0	77.0	78.5	78.2	79.9
(STD)	(9.0)	(8.1)	(9.4)	(8.9)	(9.0)	(7.9)
Pass	88.8%	91.0%	86.7%	89.2%	88.2%	91.5%
Nobs	17020	2395	33565	1640	124530	1185
			Provincial Nominees			
Mean	74.2	71.8	74.1	70.3	67.7	70.3
(STD)	(10.7)	(13.2)	(10.7)	(12.8)	(14.6)	(13.1)
Pass	77.6%	70.6%	81.1%	67.4%	59.0%	65.0%
Nobs	2180	2470	3430	10405	735	2040
			Family			
Mean	59.7	70.2	57.9	61.3	58.2	65.4
(STD)	(18.0)	(14.3)	(18.5)	(17.0)	(17.9)	(16.8)
Pass	43.3%	67.0%	39.2%	46.4%	38.3%	56.2%
Nobs	24280	3100	51515	4555	140730	1705
			Business (general)			
Mean	60.7	63.6	52.7	63.7	56.8	53.4
(STD)	(16.2)	(16.1)	(16.1)	(14.6)	(16.4)	(18.3)
Pass	41.0%	48.3%	22.5%	46.7%	33.0%	31.3%
Nobs	525	175	6335	90	4845	30

Data source: IMDB, Author's calculation