Chapter 7

The international portability of migrant human capital: Canadian experiences

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Post-migration skill utilisation is fundamental to the successful economic integration of immigrants in a receiving country. Essential to the process are both the role of diverse economic actors in influencing skill relevance and credential/qualification recognition, and the growing understanding that the value of certain skills (e.g., education) in the labour market is conditional on the presence of other skills (e.g., receiving country language ability) together with the incorporation of this understanding into policy. This chapter explores recent developments in Canada, focusing primarily on immigrant selection policy related to skill portability. Canada is in the midst of a major reform of its immigrant selection system that is strongly influenced by a desire to facilitate skill portability leading to labour market success, and which seems to align with recent research findings. However, unanticipated responses to public policy initiatives are common, and there is a need to monitor ensuing developments to ensure that the observed changes in outcomes align with the policy goals.

7.1. Introduction

Immigrant success in a receiving country's labour market is to a large extent determined by the degree to which human capital's cognitive and non-cognitive elements are "portable". Portability concerns the relevance, and utilisation of pre-migration skills in the post-migration society, especially its labour market. Notably, the degree of skill transfer is influenced by the actions of a variety of stakeholders. These include immigrants themselves, both individually and collectively, as well as the joint actions of many individuals, organisations and institutions within the receiving country's labour market, government and broader society.

A closely related issue is foreign credential/qualification recognition, where it is beneficial for both immigrants and the receiving country population (especially employers) to understand which credentials and qualifications are equivalent, or not equivalent, to those common in the receiving country labour market. This is not straightforward. Also, other skills – such as literacy in the receiving country's language – may mediate the value of educational skills in the labour market.

Limitations in the portability of human capital by immigrants are sometimes attributed to either the supply (e.g., immigrant) or demand (e.g., employer) sides of the labour market. However, it is fruitful to interpret the observed outcomes as reflecting an equilibrium, although a simple supply and demand model is not adequate. There are many economic actors beyond employers and (immigrant) workers, with institutions and organisations – such as unions, regulatory colleges, professional associations, educational institutions, credentialing bodies, and of course government – playing especially important roles in constraining the observed equilibrium. Given the wide range of relevant actors, there is room for policy – not only government policy, but also that of other institutions – to influence the equilibrium.

This chapter explores recent developments in Canadian immigration policy that are relevant to skill portability, with a particular focus on immigrant selection. It also relates these policy changes to selected pertinent academic research evidence. An appreciable set of policy changes have occurred in the past decade or so, and while the associated changes in outcomes will only become known over the coming decades, it is worth considering their motivations and policy goals.

One problem in policy development is that forecasting (understanding) the impact of a particular policy change on the full range of relevant outcomes, in the short and long term, is not always possible. Unintended consequences abound, including overshooting the mark. Follow-up, both monitoring and more in-depth analyses, on an ongoing basis is therefore essential. In the past few years Canada has, for example, seen policies regarding immigrant selection introduced that subsequent monitoring has shown quite quickly to be having impacts sufficiently different from what was intended that further changes were introduced quite rapidly.

One illustrative example of a rapid alteration in policy involves an effort to deal with a longstanding problem in Canadian immigration selection: far too many applications relative to the target intake. Until recently there was a political unwillingness to address the gap resulting in a substantial backlog (or "inventory") of applicants. On November 29, 2008, ministerial instructions were issued establishing occupational screens whereby only those in 38 specified "in-demand occupations" were permitted to apply in the economic class's skilled worker programme unless the applicant had arranged employment or was residing legally in Canada as a foreign student or temporary

foreign worker for at least a year.[2] However, instead of reducing the number of applications by preventing potential immigrants in many non-listed occupations from applying, the occupational listing appears to have been interpreted as an encouragement for applications in those categories. Quotas on each category were therefore introduced and the number of occupations reduced to 29 effective June 26, 2010, and on July 1, 2011 the quotas were further reduced. On July 1, 2012 a "pause" in the acceptance of new applications to the skilled worker programme was announced during which many in the backlog were processed while others had their applications returned without processing. In this example, an effort to improve skill portability (and/or skill targeting via occupational selection) was combined with an effort to solve a different administrative problem – excess applications leading to long processing times caused not by slow administration but by the annual targets. Although the discussion in this chapter focuses on skill portability, as in this example it is frequently only one aspect of a larger and more complex set of interacting aims/motivations. In many cases, however, the broader context will not be addressed in this discussion. Nevertheless, some context is necessary for interpretation.

In Section 7.2 a brief synopsis of the Canadian context is presented in order for readers to understand the motivations for some of the policy changes discussed. For readers familiar with Canadian immigration institutions and policy this section may be omitted. Section 7.3 addresses the portability focusing on three distinct aspects of skills that are central to labour market outcomes: first, the changing bundle of characteristics associated with altering source countries, with a particular focus on language; second, the declining economic rate of return to pre-migration labour market experience; and third, issues related to the economic rate of return to pre-migration education and qualifications. Section 7.4 addresses the interactions between skills, suggesting that outcomes are best considered as following from collections or baskets of skills embodied in individuals, rather than particular skills operating independently. In this context, the portability of one skill may depend upon the presence (or absence) of a quite different one. Section 7.5 concludes.

7.2. The Canadian context

To understand Canadian experiences with immigrant human capital portability, it is necessary to have a basic understanding of the context. Over the past several years, there have been a large number of legislative, regulatory, policy and procedural changes regarding immigrant selection and some changes regarding the provision of settlement services although this discussion focuses mostly on the former. In large part, these are a response to both declining labour market outcomes for new immigrants and simultaneous calls from employers for the immigration system to provide workers with specific skills. Allied with this is an effort to reduce the concentration of new immigrants in particular cities, and to serve regional labour market demands. Most of these changes are either directly relevant to, or indirectly influence, skill portability. Evidence, history, and elements of the recent debate are presented from an economic perspective by Beach et al. (2011), Ferrer, Picot, and Riddell (2012), Picot and Sweetman (2012, 2005), and Aydemir and Skuterud (2005).

A preeminent feature of Canada's permanent immigration system is its scale. With an intake of approximately 0.7 or 0.8% of the population annually, it is about two times larger than the rate in the United States (including most estimates of undocumented workers), and is comparable in magnitude to Australia's.[3] Canada also has a substantial

and in the last decade growing temporary resident programme, with the number of temporary residents in the country in 2012 equaling about four times the permanent flow. About 45% are temporary foreign workers (TWFs), 30% students, 11% humanitarian, and almost 14% are classified as "other" according to Citizenship and Immigration Canada (2012, p. 53). However, the visa label reflects the primary reason for being in Canada, and many beyond the TFW category would have permission to work. As will be discussed, in recent years a number of new bridges have been built between the temporary and permanent migration flows (beyond traditional pathways such as refugee/humanitarian flows and the live-in-caregiver programme).

Closely associated with the size of the flow is the highly structured and managed nature of immigrant selection. Although there are only four main immigrant classes – economic, family, refugee, and other – there are numerous sub-categories as can be seen in Table 7.1. To interpret this table, it's necessary to understand the priority accorded to various categories and sub-categories in processing. For example, within the family class, spouses and partners are given priority in processing such that parents and grandparents effectively become a residual given the annual target for family class as a whole. A call to increase the size of the family class is, therefore, effectively advocating for an increase in the parents and grandparents sub-category. This does not mean that the parents and grandparents sub-category is not amenable to policy – for example, the target admission level for the family class has recently been increased so as to essentially temporarily double the flow of parents and grandparents in order to, together with a pause on the receipt of new applications, reduce a backlog in the sub-category – but the administrative priority given to various sub-categories needs to be understood in order to interpret the operation of the system. Similarly, for example, within the economic class provincial nominees are processed with priority relative to those in the skilled worker category, and ministerial instructions have been used to prioritise applicants according to various well defined criteria.

Understanding the distinction between principal applicants, and their spouses and dependants, is also crucial to comprehending the operation of the system. While health and criminal background checks apply to all individuals, the criteria of the immigration selection system apply only to principal applicants. So, for example, the points system associated with the skilled worker programme is only applied to each principal applicant, with each family choosing which member will serve as the principal applicant (and usually choosing the male). There are personable suitability points in the current version of the system for the characteristics of a spouse/partner, but they are awarded to the principal applicant.

One of the effects of the reforms of the last decade is that the system is far more complex than it was previously, especially since the Provincial (and Territorial) Nominee Program is actually an amalgam of roughly 60 separate provincial/territorial programmes operated by all provinces except Québec. It commenced as an extremely small flow of individuals in the mid to late 1990s, but expanded rapidly in the 2000s. Further, the skilled worker numbers presented in Table 7.1 are actually the sum of two distinct programmes: first, the federal programme which includes those intending to reside in all provinces except Québec, and, second, a separate but associated programme that operates in Québec and admits immigrants intending to reside in that province. Of course, once an immigrant arrives in Canada she or he has rights with respect to geographic mobility and the intended destination is far from perfectly correlated with the subsequent location of residence.

Table 7.1. Immigration to Canada by class, 2012

Category		Count	Percentage of permanent residents	Percentage of class
Family class				
Spouses and partners		39 533	15.3	60.8
Sons and daughters		2 715	1.1	4.2
Parents and grandparents		21 815	8.5	33.6
Others		945	0.4	1.5
Subtotal		**65 008**	25.2	100.0
Refugees				
Government-assisted refugees		5 430	2.1	23.5
Privately sponsored refugees		4 220	1.6	18.3
Refugees landed in Canada		8 586	3.3	37.2
Refugee dependants		4 858	1.9	21.0
Subtotal		**23 094**	9.0	100.0
Economic class immigrants				
Canadian Experience Class	- principal applicants	5 943	2.3	3.7
	- spouses & dependents	3 416	1.3	2.1
Skilled workers	- principal applicants	38 601	15.0	24.0
	- spouses & dependents	52 868	20.5	32.9
Entrepreneurs	- principal applicants	127	0.0	0.1
	- spouses & dependents	352	0.1	0.2
Self-employed	- principal applicants	89	0.0	0.1
	- spouses & dependents	153	0.1	0.1
Investors	- principal applicants	2 616	1.0	1.6
	- spouses & dependents	6 742	2.6	4.2
Provincial/territorial nominee	- principal applicants	17 200	6.7	10.7
	- spouses & dependents	23 699	9.2	14.7
Live-in caregivers	- principal applicants	3 690	1.4	2.3
	- spouses & dependents	5 322	2.1	3.3
Subtotal		**160 819**	62.4	100.0
Other				
DROC and PDRCC*		4	0.0	0.0
Temporary resident permit holders		67	0.0	0.7
Humanitarian and compassionate cases		2 928	1.1	32.7
Other humanitarian and compassionate cases		5 962	2.3	66.5
Subtotal		**8 961**	3.5	100.0
Category not stated		**5**	0.0	100.0
Total		**257 887**	100.0	100.0

Note: At July 1, 2012, Statistics Canada estimated Canada's population to be 34 754 300 which implies a 0.74% permanent immigration rate.

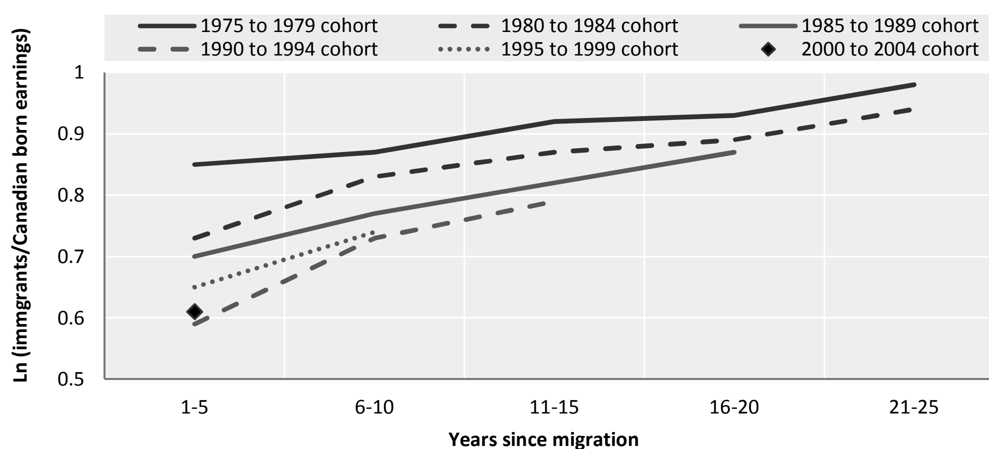
* Deferred Removal Order Class and Post-determination Refugee Claimants in Canada.

Source: Citizenship and Immigration Canada, *Facts and Figures*, 2012.

Since the the late 1980s immigrant intake in family and refugee classes has remained roughly constant (except for an appreciable spike up during the recession in the early 1990s), but it has slowly shrunk as a percentage of the total permanent migrants flow.[4] In contrast, the economic class has expanded in absolute numbers and as a percentage of all immigrants.[5] This increase in both the number and share of skilled applicants, and the concurrent increase in high-skilled (highly educated) immigrants has rendered issues of skill portability ever more crucial.

Perhaps most crucially as regards skill portability, since the 1970s and 1980s Canada has seen a marked decline in the economic outcomes of new immigrants. This is illustrated in Figure 7.1 for full-time males, but similar plots for all workers and females (not presented) look remarkably similar with one exception. Plots not controlling for characteristics such as age and education show smaller gaps in general (since immigrants are more likely to, for example, be university graduates than the Canadian born), and across cohorts there are (mostly) better outcomes for those arriving subsequent to the late 1990s when new immigrants' educational attainment and share in the economic class trended up. In the late 1970s, upon arrival new immigrants' earnings were just over 85% of comparable Canadian born workers. With years in the country, their earnings then increased relative to those of the Canadian born (and, in this time frame, they are the only cohort to surpass the Canadian born if statistical controls for characteristics are removed). However, subsequent arrival cohorts saw their relative earnings at entry decline.[6] Simultaneously, poverty rates increased for immigrants but declined for the Canadian born.[7] This decline in annual earnings and the concomitant increase in poverty rates have been well studied, as surveyed in the references listed above, and issues of skill portability are central to many of the proximate sources of the decline identified. The section turns now to three specific issues thus identified, before turning to recent work looking at interactions among such factors.

Figure 7.1. Declining immigrant annual earnings across entry cohorts



Note: The average earnings of various entry cohorts of immigrants as a function of years since migration relative to those of comparable Canadian-born, full-time full-year male workers aged 16 to 64. Predictions from an econometric model.

Source: Various censuses of Canada, adapted from Picot, G. and A. Sweetman (2012), *Making It in Canada: Immigration Outcomes and Policies,* Institute for Research on Public Policy, Montreal.

7.3. Aspects of skill portability central to labour market outcomes

Human capital portability is influenced by a wide variety of issues including labour market conditions in the receiving country, especially at the time of arrival. For example, immigrants who arrive in the expansionary phase of the business cycle appear to find skill portability easier than do those who arrive during or shortly after a recession, prompting calls such as that from Picot and Sweetman (2012) for a return to a procyclical intake policy. On a different "macro" issue reflecting the labour market, Hou and Picot (2014) observe that immigrant labour market outcomes vary as a function of the size of the arrival cohort of which they are a part (statistically controlling for state of the business cycle at entry). A 10% increase in an entering cohort's size is associated with a 0.8% decline in entry earnings for men, and a 0.3% decline for women. Centrally for this analysis, several drivers of the decline in the market outcomes for new immigrants have been identified, three broad areas of which are directly related to human capital portability. It is on this set that this chapter focuses, first introducing the relevant economic evidence and then discussing relevant policy and process changes.

Changing source countries (and domestic language)

Although there are ongoing changes in immigrant source countries, the most significant shift followed Canada's move away from a "preferred nation" immigration selection policy and the introduction of the points system in 1967, which had its most substantial impact in the 1970s and 1980s. Associated with changing source countries is a bundle of characteristics including changes in the sending countries' language, culture, occupational structure, the quality of educational outcomes, workplace technology norms, and the like. It is very difficult to objectively disentangle this bundle, which are simultaneously determined.

There is (in my view) convincing evidence regarding the existence of ethnic discrimination by employers (e.g., Oreopoulos, 2011), however there is also evidence (e.g., Schaafsma and Sweetman, 2001) that the relationship is not simple. Potentially, acculturation or some similar mechanism also plays an important role since, on average, immigrants who are what in Canada are termed "visible minorities" have declining labour market outcomes as a function of, especially, age at immigration (holding other observable characteristics constant). Moreover, as observed by Aydemir and Sweetman (2008), and Finnie and Mueller (2010), with some exceptions for those who arrive just before the end of high school, in almost all ethnic groups Canadian immigrants in the so-called 1.5 generation (those who arrive as children and obtain their education in Canada) have both educational outcomes that are commonly above (sometimes much above) the norms of the third generation and subsequent labour market outcomes that are similar to or above Canadian norms.[8] Plausibly, while ethnic discrimination by employers and others exists and has something to do with visible appearance or other similar markers, it also in part reflects an ability to navigate the Canadian labour market that is influenced by language skills, Canadian education, an understanding of local social norms, and the like. Relatedly, it is recognised that there is appreciable heterogeneity across ethnic groups in labour market outcomes (e.g., Pendakur and Pendakur 1998) and educational attainment (e.g., Finnie and Mueller 2010). But, although newly arrived ethnic groups may deviate from past patterns, historically there is also evidence of intergenerational convergence in education and earnings as observed by Dicks and Sweetman (1999).

In terms of government policy, it has long been recognised that a crucial element of immigration-responsive policy is the need to address the resulting increase in ethnic diversity. Although there are many precursors, in Canada federal multiculturalism policy, centered on a legislative initiative, was most clearly articulated starting in 1971. This, not coincidentally, followed the massive 1967 revision to immigration policy and practice that included the introduction of the points system in part with a goal of substantially increasing the ethnic diversity of the immigration flow. Much federal and provincial legislation and policy regarding human rights, antidiscrimination, and multiculturalism have followed. This is not primarily focused on immigrants, but on the receiving/domestic populace and especially employers. In terms of the new immigrants, however, settlement policy, and the provision of settlement services including free/subsidised Canadian official language (i.e., English and/or French) training, training with respect to societal integration, and job search assistance are central to the acculturation process and to skills portability.

Although it is difficult to separately identify the bundle of issues associated with changing source country, much research and policy attention has focused on the central role of domestic language skills (recognising that language may also proxy other characteristics and skills). Almost universally, language has come to be viewed as central to immigrant skill portability. Many studies, such as Beach, Green, and Worswick (2011), include measures of self-reported English/French language knowledge and show that there is an important relationship with labour market outcomes. However, an important precursor to a discussion of language is the recognition that self-reported language ability is an error prone measure. Using various combinations of the Ontario Immigrant Literacy Survey, the International Adult Literacy Survey, and the Adult Literacy and Life Skills Survey, all of which have very substantial Canadian sample sizes and direct measures of literacy, Ferrer, Green, and Riddell (2006), and Bonikowska, Green and Riddell (2008) illustrate the value of language skills formally assessed on a common metric for labour market outcomes. They also show there are substantial economic returns to literacy skills in the labour market and that these are statistically indistinguishable for the Canadian born and immigrants. However, the distribution of English/French literacy scores for immigrants is lower for immigrants than the Canadian born.

A large number of policy changes with respect to language have occurred in the last 10 to 15 years. The foundational policy/legislative change of the current era was the introduction of the Immigration and Refugee Protection Act (IRPA) in 2002, which raised the share of points allocated for language from 13 to 24%. More recently, several equally important changes have occurred including, adding a language pre-screen prior to the points system for skilled workers (and as a screen for the Canadian Experience Class discussed below). Previously, poor language skill points could be counterbalanced by high scores in other dimensions for skilled worker principal applicants. Also, fluency in one language was effectively treated as equivalent to a modest knowledge of both English and French. While the points system still operates, there is now a distinction between an immigrant-selected first (more points) and second official language, in addition to language now having the aforementioned independent threshold. Perhaps even more importantly, language skills were previously assessed in a nonstandard manner, whereas currently language is universally tested according to a standardised benchmark for skilled worker principal applicants in some economic categories. Though only briefly summarised here, these are extremely important changes to the immigrant selection process. Clearly, both researchers and government policy makers now view language as the central predictor of post-migration labour market and social outcomes.

The economic rate of return to pre-migration labour market experience

For the last few decades in Canada there has been a small to zero, or even a negative, economic rate of return to immigrants' average (potential) pre-migration labour market work experience as noted by Schaafsma and Sweetman (2001).[9] That the economic value of these skills has effectively declined to zero represents a very substantial economic loss for migrants to Canada and is a central issue of skills portability. Aydemir and Skuterud (2005) estimate that the decline in the return to pre-migration experience is responsible for between one quarter and one half of the overall decline in entry earnings. Making an allied observation, Green and Worswick (2010) point out that this contrasts with the substantial rate of return to general work experience for the Canadian born. Moreover, they point out that this return increased for the Canadian born (as did, it appears, the return for post-migration experience for new immigrants) following a marked decline in outcomes for new labour market entrants in the 1980s. That is, the increase in the return follows mostly from a decline in the base rather than an increase at the high end. The decline in entry earnings for all new entrants to the labour market, they demonstrate, is one of the reasons for the decline in entry earnings for new immigrants. For the most part, new arrivals, regardless of age and pre-migration experience, are treated by the labour market as new labour market entrants and thus experienced a decline in earnings.

Aydemir and Skuterud (2005) divide the immigrant population into four groups based on gender and whether the individual was from a "traditional" or "non-traditional" source country. They observe that the rate of return to pre-migration work experience has declined for all four groups, and it only remains positive for males from traditional source countries.

Goldmann, Sweetman, and Warman (2011) using longitudinal data following a particular entry cohort for four years from the early 2000s, observe that on average the rate of return to pre-migration experience is negative. However, they extend the analysis to look at pre-and post-occupational matching and observe a substantial increase in labour market earnings for those immigrants who match occupations – a group for which pre-migration experience is expected to matter. Oddly however, while there is a very substantial benefit to matching occupations, for the sample as a whole there is no difference in the value of obtaining such a match among those with varying degrees of pre-migration experience. Econometrically, achieving an occupational match is associated with an intercept shift, but those with more or less pre-migration experience in the relevant post-migration occupation see no difference, on average, in their earnings. Of course, there are important sample selection issues regarding who does, and does not, attain an occupational match. Further, when they allow for interactions with language ability, and in a result broadly consistent with that of Aydemir and Skuterud, they observe that males who both match their occupation and have substantial English language skills do obtain a positive, although modest, rate of return to their pre-migration work experience. This appears to be the only group to do so.

From a policy perspective, there have been substantial swings with respect to the treatment of pre-migration occupational experience. Prior to the reforms of 2002, occupational experience was part of the point system, with points assigned for experience in occupations in demand. However, for administrative reasons as well as its negligible predictive power for labour market outcomes, occupational experience was removed with the introduction of the IRPA.[10] The emphasis shifted towards a long-term model based more on language and educational credentials, as opposed to a short-term "occupations-in-demand" model. More recently, pre-processing occupational criteria were reintroduced

to the skilled worker programme in the form of screens whereby individuals without work experience in selected "in-demand" occupations were not able to apply (with the two exceptions discussed in the introduction together with other context). Given demands from employers, and other measures of current and future labour market needs, there is substantial pressure on government to select immigrants based on occupational human capital.

New approaches to immigrant selection attempting to address labour market demands have also been introduced. First, in the mid-1990s the Provincial Nominee Program (PNP) was instituted in large part to allow provincial governments, which are assumed to be closer to local labour markets, to attract immigrants in response to regional demands. Carter et al. (2010) report, however, that while Manitoba's Provincial Nominee Program initially attempted to target occupational shortages it moved away from doing so quite quickly given their rapid fluctuations. A large number of provinces allocated a significant portion of their quota to individuals where employers had a substantial input in selection. Frequently, these individuals had pre-migration Canadian labour market experience as temporary foreign workers. Overall, although results are preliminary given that the programme is relatively new and changing as it expands, Pandey and Townsend (2013) suggest that PNP appears to be successful in promoting a greater regional distribution of new immigrants even if targeting shortages remains difficult.

Second, in part emulating existing programmes in Australia and/or New Zealand, the federal government introduced the Canadian Experience Class, which recognises, in one stream, legal Canadian work experience (frequently as a temporary foreign worker), and in a second stream, Canadian post-secondary educational credentials combined with post-graduation Canadian work experience while on a temporary visa. Background information on these programmes can be found, for example, in Pandey and Townsend (2013), and Sweetman and Warman (2010a, 2010b). Increasingly, employers have been given substantial input in immigrant selection, with a key issue being to leverage their credential recognition/evaluation capabilities and to increase the portability of immigrant human capital with respect to pre-migration labour market experience (and education, as will be discussed in the next sub-section). In the case of the Canadian Experience Class, although Canadian employment is key to initiating the application, the potential immigrant must also meet language requirements and normal health, security and related screens. There are debates about providing employers with too much input in immigrant selection following from the fundamental differences between the long-term view of society, and the short-term one of employers. However, if initial conditions have long-run consequences, then the advantages provided in employers choosing whom to hire as temporary foreign workers may be quite important.

Qualification recognition/portability turns out to be particularly difficult for workers in the skilled trades, and the federal government has recently introduced a new Skilled Trades Program that relies to a large extent on employers and/or regulatory bodies to validate qualifications in advance of migration. One requirement is that immigrants must "have an offer of full-time employment for a total period of at least one year or a certificate of qualification in that skilled trade issued by a provincial or territorial body" (Citizenship and Immigration Canada website, www.cic.gc.ca, consulted February 2014).

The approach with respect to skilled trades – in requiring a connection with an employer and/or a regulatory body – exemplifies a more general approach increasingly being undertaken by the federal government in immigrant selection. Much effort has gone into providing more information pre-migration, and directing potential immigrants to

appropriate credentialing bodies (which are almost entirely under provincial, not federal, jurisdiction) in advance of being admitted as permanent residents. The goal is to improve labour market outcomes at entry and to speed up the economic integration of new arrivals. Of course, while this is relevant for foreign work experience, it is equally so for educational credentials discussed in the next section.

However, before addressing education and qualifications, it's useful to look at work experience from an alternative perspective. For any given level of education, increasing the quantity of pre-migration work experience implies that the immigrants' age at immigration is increasing. Therefore, the decline in the rate of return to pre-migration labour market experience can simultaneously be interpreted as a growing penalty associated with immigrating at older ages. Schaafsma and Sweetman (2001) suggest that for adult immigrants there is a gradual decline up until ages in the mid-30s, after which the rate of decline in labour market outcomes with increasing age at immigration becomes steeper. In response to evidence of this type, and also with a (modest) demographic rationale, the points for age within the skilled workers points system have been modified to emphasize youth.[11]

The economic rate of return to pre-migration education and qualifications

The valuation of immigrant education in the Canadian labour market is a complicated topic. Augmenting the average education levels of new immigrants together with facilitating educational/credential/qualification recognition has been a centerpiece of relevant federal and provincial governments' policies and processes for several years with respect to improving the labour market outcomes of new immigrants – for an overview, see Albaugh and Seidle (2013). This double-barreled approach targets both immigrants and the receptor capacity of the nation. In fact, the emphasis on credential recognition started in a period when there had been no appreciable decline in the rate of return to education for new immigrants. As observed by Aydemir and Skuterud (2005) using data from 1966 to 2000, a gap did (and does) exist in the rate of return to education between immigrants and the Canadian born, but the gap was relatively stable and was not an appreciable cause of the decline in entry earnings. However, policy to increase education levels among new arrivals and also improve their rate of return to education may alleviate the declining labour market outcomes of new migrants even if it is not a cause of that problem.

At the same time that credential recognition was being addressed, the size of the economic class was increased, and within the class the average level of education was also increased appreciably. For principal applicants in the skilled worker stream the latter was accomplished largely by increasing the points allocated for education. During this period of increasing average educational attainment of new immigrants, the earnings advantage *at entry* of post-secondary educated immigrants within this class declined relative to the earnings of those with lower levels of education. Plausibly, the increasing share of the flow with high levels of education meant that to make it through the points system individuals with low levels of education, a declining share of the flow, had a very high probability of already having a job offer pre-migration in order to obtain sufficient points to qualify. This gave them an initial advantage in the labour market and facilitated skill portability. However, post-migration earnings growth among those with higher education increases much more rapidly such that there is a substantial gap several years after landing.[12]

A very particular decline in the rate of return to education occurred in the early 2000s. In the preceding years, a substantial emphasis had been put on high-skilled immigrants in engineering and information technology occupations. This was in large part in response to demands from employers, but it also recognised the historic high level of success experienced by this group and that their skill portability was less contentious than in some fields. As documented by Picot and Hou (2009) the so-called "IT bust" of the mid-2000s had a very strong negative impact on labour market outcomes of this cohort of highly educated immigrants with very specific skills, and frequently quite poor language skills that hindered flexibility in shifting to alternative occupations and/or entrepreneurship. This policy episode highlights the aforementioned fundamental differences of perspective between employers and society. Governments cannot "layoff" permanent resident/citizens, and the perspective of government needs to include both the short- and long-term. The episode also points to concerns regarding government policy "overshooting". While placing some emphasis on this particular skill category did make sense, the scale of the effort was disproportionate to the risks involved.

On a different note, foreign qualification recognition for new immigrants has received much popular and media attention, with a particular focus on regulated professions. Like much regarding economic return to education, the picture here is quite complicated. Li and Sweetman (2013) point to international test scores (e.g., the OECD Programme for International Student Assessment or PISA, and its Programme for the International Assessment of Adult Competencies or PIAAC) that illustrate dramatic differences in educational outcomes across countries, and they find that for immigrants who arrive as adults the rate of return to education in the Canadian labour market is correlated with source country average test scores. That is, immigrants from countries with higher quality education systems receive, on average, a higher rate of return to education in the Canadian labour market. Moreover, both Bonikowska et al. (2008) and Ferrer et al. (2006) find that economic rates of return to measured skills (as opposed to credentials obtained in various countries) is statistically indistinguishable between immigrants and the Canadian born. Focusing on regulated health professions, Owusu and Sweetman (2013) observe that the pass rate among foreign trained professionals writing licensing exams is dramatically below that for the Canadian trained.

Several policies have been pursued in response to these issues. First, credential evaluation is commencing as part of the immigrant selection process for skilled worker principal applicants. Previously, although credential verification (to detect fraud) may have been undertaken, broadly speaking all post-secondary qualifications with the same years of study were viewed as equivalent. In the new model, an understanding of (non-) equivalencies between foreign and Canadian qualifications is being built into the selection system. Second, as mentioned with respect to foreign work experience, the federal government has increased its provision of pre-migration information and is encouraging, and sometimes requiring, potential immigrants in regulated professions to have their qualifications verified prior to processing for permanent residency. Third, employers are being given a larger role in immigrant selection, which to some extent implies their evaluating immigrant/employee credentials as part of the hiring process. Fourth, there has been an increased emphasis on educational bridging programmes that recognise foreign education and seek to address gaps relative to Canadian norms so that pre-migration education is not lost but rather made useful by the addition of complementary educational inputs.[13] Fifth, regulatory bodies in many jurisdictions have been under increasing pressure to ensure that their processes are not biased against immigrants. In four provinces "Fairness Commissioners" (so named in some

jurisdictions) have been established with mandates to investigate regulatory bodies and recommend changes to ensure that processes and requirements are providing public protection but not protectionism.

7.4. Interactions between skills affect portability

As foreshadowed, for example regarding occupational matching, recent research has started to understand the empirical importance of the interrelationships between the various skills possessed by new immigrants. Building on the analysis discussed earlier, Ferrer, Green and Riddell (2006) note that immigrants have a lower rate of return to education than the Canadian born, and also have lower literacy skills than the Canadian born. However, once literacy skills – as measured by formal tests – are controlled for statistically, the rate of return to education is statistically indistinguishable between the two. That is, individuals with the same level of literacy received the same rate of return to education, and the observed lower rate of return to education is "explained" by lower English/French literacy skills. Goldmann, Sweetman, and Warman (2011) similarly find that language skills mediate the rate of return to education. For both males and females the observed low rate of return to education can be seen as reflecting distinct rates of return within a heterogeneous population. Those with very low language skills effectively receive a zero rate of return on their education, and the rate of return to education increases with the level of language skills in the remainder of the population. Those with high levels of language skills receive high rates of return to education (in addition to a direct contribution to earnings from the language skills themselves).

Historically, Canada's points system treated each skill or attribute independently, but more recent research provides evidence suggesting that the empirical magnitude of the interactions among various sets of skills is non-ignorable. Advanced education, in the absence of appropriate language skills, has little value in the receiving labour market. In response to this type of research, selection policy has been altered in some classes so that higher education levels need higher language skills to pass the required threshold. This approach operationalises the relevant research.

Much more broadly, Canada is in the midst of developing an "expression of interest" selection process akin to that employed in New Zealand, and introduced recently in Australia. Although the details have not been announced, it seems likely that selected streams of the economic class will be deemed to be subject to this approach. In general terms, potential immigrants express an interest in immigrating; the government then ascertains that they meet particular minimum standards, where, in the realm of skills, language is central. Employers, and the provincial and federal governments, may subsequently nominate immigrants from this pool of pre-screened individuals. Employers will use their hiring processes that consider the interactions of various skills and attributes embodied in individuals and relevant for productive contributions in the labour market. Governments may choose those they think most in demand in the labour market. It remains to be seen how this concept will work in practice in the Canadian context. From an employer's point of view, this stream will compete with non-expression of interest immigration pathways and they may find other approaches preferable. It remains to be seen whether, and to what degree, changes will be made to alternative pathways once the expression of interest approach is introduced.

7.5. Conclusion

Canada has undertaken, and is undertaking, a broad set of major policy reforms with respect to immigrant selection, and is also making some changes regarding settlement and the reception capacity of the host society, in an effort to improve immigrant labour market outcomes and maximise the value of immigration for both the nation and new immigrants. This survey has focused primarily on selection issues, although settlement-side initiatives such as the introduction of Fairness Commissioners in some provinces, and foreign credential/qualification recognition initiatives more broadly, may have important implications for particular sub-sets of new arrivals.

Many of the policies being introduced directly or indirectly target not only the portability of human capital, so as to better address domestic labour market needs, but also the assessment of various skills (especially English and French ability) and educational credentials. Moreover, many of these policies explicitly recognise the interactions among various types of skills, and especially the crucial role of language in mediating elements of human capital portability.

Overall, these policies are in accord with the findings of the empirical, especially economic, research literature in the sense that they can be seen as attempts to address issues highlighted by various academic and think tank research efforts. Of course, as illustrated in the introduction, unanticipated responses to public policy initiatives are common and there is a need to monitor ensuing developments to ensure that the observed changes in outcomes align with the policy goals. Although technically challenging, there is also a need to recognise that almost all empirical immigration research in Canada focusses on the economic well-being of immigrants (economic integration), whereas the Canadian Immigration and Refugee Protection Act (http://laws.justice.gc.ca/eng/acts/i-2.5/; see, especially Section 3 on "Objectives and Application") primarily focusses on issues regarding the impact of immigration on the receiving nation, which is also a major if controversial focus of research internationally. At the interface of the "integration" and "impact" research efforts, more work on immigrant outcomes across the life-cycle is also undoubtedly warranted, particularly with a focus on fiscal impacts for government.

Finally, there has been relatively little large scale empirical research on the ramifications of alternative approaches to settlement service provision to support evidence-based policy in this domain. Settlement services should be interpreted broadly to include language training, job search assistance and the like, but also to include the operation of important labour market institutions (such as regulatory bodies) and policies regarding racial/ethnic/immigrant discrimination, some of which are currently being adjusted in attempts to facilitate the portability of newcomers' human capital. As is the case with most immigration policy areas, settlement is undoubtedly a "two way street" with, on one side, the provision of services focusing on assisting immigrants to adjust to, and integrate into, Canadian society and the Canadian labour market. Simultaneously, on the other side, policies also seek to make the Canadian labour market more "immigrant friendly" by facilitating the labour market's capacity to receive immigrants and maximise their productivity.

Notes

1. Thanks to Garnett Picot, Leslie Seidle, and many individuals at Citizenship and Immigration Canada, especially Strategic Policy and Planning, Immigration, and Research and Evaluation, for their advice and useful comments; any remaining errors are, of course, my own. Opinions expressed in this chapter are those of the author and are not necessarily those of either the Governments of Canada or Ontario.

2. Rapid application processing, which is impossible with a backlog, can be an important facilitator of skill portability. Matching labour market needs with immigrant skills can facilitate portability by providing jobs reasonably quickly and preventing skill atrophy during extended job search. Details regarding ministerial instructions can be found at www.cic.gc.ca/english/department/mi/#mi1.

3. For most of the early post-World War II period, the Canadian immigration rate was typically three times larger than that in the United States, but the American rate has been trending up in the past few decades. Also, prior to 1990 Canadian immigration was strongly procyclical, whereas subsequent to that it has been largely unrelated to the business cycle. For several years preceding recent changes, Canada received applications representing on the order of 450 000 individuals for a target intake of in the neighbourhood of 250 000.

4. Three distinct but related policy changes resulted in the recession of the early 1990s being the first in Canada's history as a nation to witness an increase, as opposed to a decrease, in the immigration rate with appreciable increases in refugee and family class flows. New arrivals attempting to enter the labour market during this recession found it extremely difficult to do so as evidenced by this cohort having the lowest entry earnings observed in Figure 7.1, although there were also composition issues driving this outcome. First, as outlined by Green and Green (2004), prior to this period Canada had a procyclical immigration policy and this was the first test of the new policy of acyclical immigration targets. Second, starting in 1988 the family class was expanded by relaxing the admissibility criteria and allowing unmarried children over the age of 21 to be sponsored. The majority of these immigrants arrived after the 1990-92 recession had started and a substantial number were over the age of 20. This policy was rescinded in 1992. The third source of new migration is appreciably different than the other two. It might be best interpreted as an administrative re-classification rather than new entrants being added to the labour market during a recession; it also points to the difficulty in interpreting empirical results without institutional knowledge. A spike (mostly over by 1992) in refugee admissions arose as part of a backlog clearance programme that dealt with claims made prior to 1988. Most of these individuals were resident in Canada and had entered the labour market with temporary work permits prior to 1988 so their "immigration" was actually a change of status, not a change of residency, and it had only modest labour market effects. It's worth noting that under this programme claimants who were not successful in establishing a credible case as a refugee were considered for landed immigrant status in other categories taking account of age, linguistic ability, length of residence in Canada, relatives in Canada, and similar factors.

5. Different "stories" can be told depending on whether one is looking at the trend in terms of levels (i.e. counts of individuals), or percentages.

6. Note that Figure 7.1 encompasses all immigration classes. Abbott and Beach (2011), and Sweetman and Warman (2013), show marked differences in labour market outcomes across immigrant classes and sub-classes. Overall, principal applicants in the non-business economic streams have higher earnings than all other groups.

7. Formally, Canada does not have a "poverty rate". Rather, Statistics Canada produces a Low Income Cutoff (LICO), which many people interpret as a poverty rate even though, for example, it focuses exclusively on income rather than wealth.

8. For a comparative overview of issues related to "immigrant generations" see Sweetman and van Ours (2014).

9. Virtually no data exist that permit actual pre-migration labour market experience to be measured. Hence, research relies almost exclusively upon *potential* experience that ignores periods of unemployment and is measured as something like: age-at-immigration minus years of pre-migration schooling minus 6, for those who complete their highest level of education prior to migrating (or, more generally, age minus years of schooling minus 6). However, as reported by Goldmann, Sweetman and Warman (2011) who use a dataset that has a measure of whether migrants had ever worked pre-migration, an appreciable number of females, and a small number of men report never having worked, and (surprisingly) the probability of having never worked in the formal labour market pre-migration is not correlated with age at immigration. This provides some evidence that potential labour market experience is not an ideal measure, and is particularly error-prone for females. Despite these caveats, the measure clearly remains extremely important although it may be mislabeled. Instead of pre-migration potential labour market experience it might be better called years between foreign graduation and migration. The accompanying observation is that previously immigrants educated abroad had post-migration earnings that increased with the number of years between graduation and immigration. However, recent decades have seen a reverse; longer periods between foreign graduation and migration are associated with stable or declining Canadian earnings.

10. One candidate explanation for the lack of a relationship between occupation-in-demand points and labour market success is that in this period the immigrant backlog was extensive, with skilled worker applications frequently taking on the order of four years to be processed. In contrast, the occupations-in-demand list was updated quarterly reflecting rapidly shifting perceptions of "demand", and points were assigned based on the list in force at the time the application was initiated. Plausibly, dramatically reduced processing time is required to facilitate occupational skills portability. Also, better approaches are required to separate long-term shortages from spurious short-run fluctuations, and to understand why wages are not increasing sufficiently to attract new entrants when there are long-term shortages.

11. It is worth noting that the impact of immigration on the nation's demographic profile is extremely modest. There may nevertheless be value in (marginally) improving Canada's demographic swings following from the post-World War II baby-boom rather than (marginally) reinforcing those swings.

12. The author thanks Feng Hou and Garnett Picot for this point. Additionally, although most policy development focuses on principal applicants, the education levels of their spouses tend to be positively correlated as shown by Sweetman and Warman (2010c).

However, the labour market outcomes of principal applicants' spouses tend not to be quite as good as would be expected conditional on their characteristics. Further, there has been little change in the earnings gap across educational categories among spouses.

13. Educational bridging programmes are distinct from traditional community college and university education programmes. Bridging programmes are intended to complement pre-migration education, addressing differences between immigrant and Canadian norms with the goal of supplementing a foreign qualification to make it equivalent to its Canadian counterpart. Bridging programmes are typically shorter than the relevant Canadian degree since they recognise an immigrant's pre-migration education.

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