# Temporary Foreign Workers in Canada: A look at regions and occupational skill

Ottawa, Canada 12 March 2015 www.pbo-dpb.gc.ca The mandate of the Parliamentary Budget Officer (PBO) is to provide independent analysis to Parliament on the state of the nation's finances, the government's estimates and trends in the national economy; and upon request from a committee or parliamentarian, to estimate the financial cost of any proposal for matters over which Parliament has jurisdiction.

This report assesses the importance of foreign workers in the Canadian economy, and then focuses on the question of foreign workers in low-skilled occupations.

It examines developments from 2002 to 2012, since the expansion of foreign worker programs to low-skilled occupations began in 2002. Where appropriate, it makes a distinction between the period up to and including the recession (2002-2009) and the post-recession period (2010 and beyond).

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### **Executive Summary**

Programs that allow foreign workers to occupy positions in Canada have existed since the 1960s and were formally introduced in legislation in the 1970s. While they generally focused on skilled workers, they were expanded to lower-skilled occupations in 2002.

While generally considered beneficial from an economic perspective, foreign workers have received significant public attention in recent years. This is the case especially in relation to foreign workers occupying low-skilled positions, considering that most unemployed Canadian workers would meet the minimum requirements to fill these jobs satisfactorily.

The initial purpose of this report was to evaluate the impact of foreign workers on local labour markets for various occupations, with a focus on assessing whether there was a quantifiable need for foreign workers in low-skilled occupations arising from labour shortages. The lack of disaggregated data on labour demand and labour supply at the regional and local level prevented us from achieving this original goal.

Instead, this report provides a high level overview of the relative importance of foreign workers in the Canadian economy between 2002 and 2012, with a particular focus on Alberta, British Columbia and Ontario, which combined account for 85 per cent of foreign workers in low-skilled occupations.

Foreign workers can enter the Canadian labour market through either the International Mobility Program (IMP) or the Temporary Foreign Worker Program (TFWP).

Those entering Canada under the TFWP do so at the request of employers who must obtain approval

from Employment and Social Development Canada (ESDC) in the form of a Labour Market Impact Assessment (LMIA). This is the category of foreign workers which attracted most of the media attention. Because of the need to obtain an LMIA, the government generally has a good knowledge of the occupational skill level of these foreign workers.

Workers entering under the IMP do so to advance Canada's broad interest rather than fill a particular job. They are thus LMIA-exempt and often benefit from an open work permit. Therefore, the government is not necessarily aware of the occupational skill level of these foreign workers.

At nearly 70 per cent, LMIA-exempt foreign workers represented the majority of foreign workers in Canada in 2012. Since 2002, their number has grown at a faster pace than workers requiring an LMIA. Moreover, in 45 per cent of the cases in 2012, the government was not aware of the occupational skill level of foreign workers, up from 22 per cent in 2002. This reflects the strong growth in foreign workers entering Canada under the IMP.

Nationally, the share of foreign workers in the Canadian labour force tripled between 2002 and 2012, although they still represented less than 2 per cent of the total labour force. A general increase occurred in all provinces, although in 2012, only British Columbia and Alberta had a share of foreign workers in the provincial labour force that exceeded the national average.

Most foreign workers are concentrated in Alberta, British Columbia, Ontario and Quebec. Alberta's share has increased significantly since 2002, while Ontario's has declined by almost 15 percentage points. Interestingly, the relative importance of foreign workers in the labour force appears to be

higher in small centres than in large census metropolitan areas.

Focusing on foreign workers for whom the skill level is known, most of the growth between 2002 and the 2009 recession came from workers in low-skilled positions. By 2009, there were more workers in low-skilled positions than in skilled positions. Since then, the number of workers in low-skilled positions has declined by 20 per cent, while the number in skilled positions has increased 20 per cent. As a result, by 2012, the majority of foreign workers were in skilled positions.

Eighty-five per cent of foreign workers in low-skilled positions were in Alberta, British Columbia and Ontario; growth was particularly robust in Alberta and British Columbia. By 2009, foreign workers in these two provinces represented 50 per cent of workers in low-skilled occupations, although that share has since declined to 42 per cent.

It is unclear why Canadian employers chose to hire foreign workers in lower-skilled occupations when most domestic workers, whether employed or not, would possess the required skill set to fill these positions.

Models of the labour market suggest that when vacancies remain unfilled, the compensation offered should increase to the point where it will become attractive for domestic workers to accept the positions. This, in turn, would generally lead to an increase in the price of the product or service sold, unless productivity gains can be achieved to offset higher labour costs.

In Canada, a significant number of foreign workers in lower-skilled occupations work in the agriculture sector, in restaurants or as babysitters, nannies and parents' helpers. These are positions at the low end of the pay scale and employers seem to have resisted increasing compensation, forcing them to rely either on domestic lower-skilled unemployed workers or on foreign workers to fill these positions.

It is possible for skilled workers to fill low-skilled occupations, a situation called *underemployment*. However, empirical research shows that underemployed workers typically experience lower job satisfaction and commitment to the firm, and are more likely to leave their job. This is potentially costly for employers. The introduction, in September 2007, of the Expedited Labour Market Opinion (E-LMO) Pilot Project, helped businesses in Alberta and British Columbia to avoid this cost by facilitating hiring of temporary foreign workers in high-demand occupations.

In addition, the size of the Canadian low-skilled labour force is continuously shrinking. For example, it has declined 26 per cent between 2002 and 2013. In many areas of Alberta, British Columbia and Ontario, there were fewer than two low-skilled domestic unemployed workers available for every foreign worker occupying low-skilled positions when the 2009 recession hit.

This was particularly true outside large census metropolitan areas, which may indicate tightness in the labour market for low-skilled workers, although a firm conclusion in this regard cannot be drawn since reliable demand and supply data do not exist. Since the recession, this apparent tightness has abated somewhat, but sustained decline in the low-skilled labour force and in the number of low-skilled unemployed suggests that businesses may continue to argue that there is still a need for foreign workers in lower-skilled positions, at least in the short run. However, care has to be taken that the policy parameters of the program allow market forces to

work and make hiring foreign workers the last resort rather than the first option for businesses.

#### 1 Introduction

The legislative mandate of the Parliamentary Budget Officer (PBO) includes providing independent analysis on trends in the national economy. Consistent with this mandate, this report examines the presence of foreign workers in the Canadian labour market and in particular, the evolution of foreign workers in low-skilled positions.

This topic has received significant public attention over the course of the last two years following a small number of highly publicized cases involving allegations that employers were abusing the program. This has led to substantial changes to the Federal Government's Temporary Foreign Worker Program (TFWP). Despite these changes, media reports continue to appear, typically citing cases in which foreign workers are employed in low-skilled occupations that could in theory be filled by unemployed Canadians.

The initial purpose of this report was to evaluate the impact of foreign workers on local labour markets for various occupations. There was particular interest in assessing whether there was a quantifiable need for foreign workers in low-skilled occupations arising from labour shortages. While Citizenship and Immigration Canada (CIC) and Employment and Social Development Canada (ESCD) provided us with useful data with respect to the number of foreign workers as well as the potential number of newcomers, the lack of disaggregated data on labour

Instead, this report first provides a high level overview of the relative importance of foreign workers in the Canadian economy as well as their activities. It then focuses more specifically on the issue of foreign workers in lower-skilled occupations, as many in the general public question why Canadian employers would rely on foreign workers to fill positions requiring a skill set that most unemployed Canadian workers would possess.

In that regard, the report focuses specifically on Alberta, British Columbia and Ontario, which are the three provinces in which most foreign workers in lower-skilled occupations reside.

### 2 The role of foreign workers in the national economy

From an economic point of view, it is in principle considered desirable to allow foreign workers to temporarily fill positions. Where there is a lack of suitable domestic workers, foreign workers allow the domestic economy to avoid losses of output by preventing wages from rising too quickly. This allows producers to adapt their production methods and avoid becoming uncompetitive, which otherwise could potentially result in closure. It also prevents inefficient interruptions in production by allowing vacancies to be filled relatively quickly (see Box 2-1).

demand and labour supply at the regional and local level prevented us from achieving this original goal, since it is not possible to measure the balance between supply and demand for various lower skilled occupations. This will remain an important unanswered question until better local and regional labour market data is collected and disseminated.

Parliament of Canada Act (2007)

<sup>&</sup>lt;sup>2</sup> In this report, foreign workers are defined as temporary residents who are in Canada principally to work in the observed calendar year. Foreign workers have been issued a document that allows them to work in Canada. Foreign workers exclude temporary residents who have been issued a work permit but who entered Canada mainly for reasons other than work.

<sup>&</sup>lt;sup>3</sup> Details of the changes can be found at <a href="http://www.cic.gc.ca/english/work/new measures work.asp">http://www.cic.gc.ca/english/work/new measures work.asp</a>, accessed on November 7 2014.

<sup>&</sup>lt;sup>4</sup> It is worth mentioning that some quantitative work on the topic does exist. Interested readers are invited to consult Gross (2014) and Gross and Schmitt (2012). However, these papers did not address the issue of a quantifiable need

### Box 2-1: A stylized labour market

To understand better the role played by foreign workers in a national economy, it is useful to develop a stylized understanding of how the labour market works.

Every firm's production depends on various inputs, the most important typically being labour. A firm's demand for labour fluctuates, depending on the level of production. Job creation is usually seen as the result of a matching process – firms post vacancies (labour demand) and workers look for jobs (labour supply). When vacancies are matched with suitable workers, jobs are created.

In cases where the vacancies remain unfilled, it is typically believed that the compensation package will be improved to the point where it will become attractive for workers, whether already employed or not, to accept the positions. This, in turn, will generally lead to an increase in the price of the product or service sold by the firm, unless some form of productivity gain can be achieved to compensate for higher labour costs.

There are, however, caveats to this process. First, since productivity gains are difficult to achieve and tend to take a long time to materialize, there is a limit to how quickly some firms can raise wages or other benefits to attract workers. Indeed, a compensation increase has to translate into either a higher final price or falling profits. An employer thus has to consider to what extent a rapid price increase will translate into a loss of business either to competitors or from consumers who switch to substitute products. Increasing wages and output prices quickly might be damaging for the firm and its existing jobs. This would be particularly true for firms in highly competitive sectors.

Vacancies that remain unfilled for extended periods of time can be damaging for firms, because long periods of reduced output might lead to a loss of customers. In many service industries, understaffed firms often result in long wait times for customers, which affect the reputation of a firm. Consider for example the case of a restaurant that can only open half its serving floor because it doesn't have enough employees to attend patrons. Customers, not appreciating long waiting periods, might elect to change restaurant if the occurrence of long wait times is too frequent.

These problems are potentially more acute in the case of low-skilled, low-paid positions. For low-skilled employment, the incentive for people to relocate is weak. There are incremental costs associated with moving oneself or one's family, such as paying for child care rather than using extended family to watch the children. The pay associated with low-skilled positions is often not high enough to justify such a move. Thus, filling these positions might take longer than filling higher-skilled positions, unless the supply of lower-skilled labour is abundant or firms decide to offer much higher wages. Employers could try to find ways to attract skilled workers in these positions, but retention issues could arise, an issue discussed in the second part of the report.

Canada has long been favorable to the temporary immigration of foreign workers. Programs that allowed foreign workers entry already existed in the 1960s<sup>5</sup> and were formally introduced in legislation in 1973.<sup>6</sup>

Initially, these programs targeted for the most part skilled foreign workers, although sector specific programs allowed foreign workers in lower-skilled positions, such as the Seasonal Agricultural Workers Program and Live-in Caregivers. In 2002, an increasing number of low-skilled occupations began to be allowed under ESDC's *Pilot Project for occupations requiring lower Levels of Formal Training*.

<sup>&</sup>lt;sup>5</sup> http://apps.fims.uwo.ca/NewMedia2008/SAWP.aspx, consulted in November 2014.

<sup>&</sup>lt;sup>6</sup> OECD 1998.

The assumption underlying the potential benefits of foreign workers is that the domestic labour force will adjust to changing labour market conditions until it can meet domestic demand anew. This requires that foreign worker programs are designed so that domestic employers have an incentive to search actively for domestic workers to fill vacancies before relying on foreign workers. These incentives are embedded in rules and constraints that are generically called *labour market tests* (see Box 3-1), aimed at ensuring that domestic workers are not adversely affected by the hiring of temporary foreign workers (Gross 2014).

### 3 Hiring temporary foreign workers in Canada

Canadian employers can hire temporary foreign workers through two distinct umbrella programs: 1) the International Mobility Program (IMP) and 2) the Temporary Foreign Worker Program (TFWP).<sup>7</sup> Table A-1 in Appendix A summarizes the main characteristics of each program.

For the purpose of this report, however, the main distinction of interest between these two programs is the requirement for the employer to obtain a Labour Market Impact Assessment (LMIA)<sup>8</sup> from Employment and Social Development Canada (ESDC).

An LMIA is essentially a test used by ESDC to determine if there are available Canadians who could fill a job vacancy. A positive LMIA means that in the opinion of ESDC, the employer has tried to hire a

Canadian citizen or permanent resident, <sup>9</sup> that the job offer is genuine and that the employer has met previous job offer commitments to temporary foreign workers. A positive LMIA states that there is a need for a temporary foreign worker to fill the job and that no Canadian worker is available to do it. <sup>10</sup>

Importantly, a work permit obtained for a foreign worker through a positive LMIA is generally specific to both a job and an employer, meaning that there are restrictions on where the foreign worker is entitled to work and what he/she can do.

On the other hand, work permits obtained without an LMIA are often "open" in that they are not job and employer-specific. The government generally has a better knowledge of the occupation of foreign workers who enter Canada via an LMIA.

#### Box 3-1: Labour market test

A labour market test is essentially a test that an employer must satisfy to be allowed to hire a foreign national on a temporary basis. As mentioned by the OECD (2008), a labour market test is above all a means to provide an opportunity for natives and legal residents to apply for a job.

Most countries applying a labour market test typically require the job to be advertised locally or nationally for a certain period of time. The employer must submit the job contract for review or specify the conditions of the contract, with special attention to wages.

To obtain an LMIA in Canada, an employer must indicate the number of Canadians who applied for the job and the number interviewed. It must explain why these Canadians were not hired.

<sup>&</sup>lt;sup>7</sup> Each umbrella program covers many specific sub-programs. For example, to hire a foreign worker under the TFWP, employers must meet different requirements according to whether they hire agricultural workers, live-in caregivers, workers in lower-skilled occupations and workers in higher-skilled occupations. Looking at each sub-program and their requirement is beyond the scope of this report.

<sup>&</sup>lt;sup>8</sup> Previously, LMIAs were known as Labour Market Opinions (LMOs). The acronym LMO is still found in many federal government publications related to foreign workers.

<sup>&</sup>lt;sup>9</sup> Employers applying for an LMIA must provide details including the number of Canadians that applied for the position and detailed reasons as to why the Canadians were not hired.

 $<sup>^{\</sup>rm 10}$  This report does not investigate nor does it purport to judge the value of the LMIA as administered by ESDC.

The Temporary Foreign Worker Program (TFWP) allows employers to hire foreign workers to fill labour and skill shortages on a temporary basis<sup>11</sup> when no Canadians are available to do the job.

Foreign workers entering Canada under the TFWP do so at the request of employers who first need to obtain an LMIA. The TFWP is the stream that has attracted most of the media scrutiny and the stream for which policy parameters have changed most significantly in recent months.

The International Mobility Program (IMP), on the other hand, lets employers hire or bring in foreign workers without the need of an LMIA. <sup>12</sup> Exemptions from the LMIA process are available when it is deemed that there are reciprocal benefits for Canadians and other competitive advantages for Canada. As such, the primary objective of the IMP is to advance Canada's broad economic and cultural interest, rather than filling a particular job. <sup>13</sup>

Two broad categories of foreign workers enter via this stream: a) those coming from countries with which Canada has an international agreement such as NAFTA, and b) those who would contribute to Canada's interests via intra-company transfers, youth and teacher exchange programs or academic research.

As Table 3-1 shows, LMIA-contingent temporary foreign workers represented a minority of foreign workers in Canada in 2012.

http://www.cic.gc.ca/english/helpcentre/glossary.asp#international mobility program, consulted in September 2014.

Table 3-1: Foreign workers present on December 1 by LMIA requirement, 2012

	No. of workers	% of total
Workers without LMIA	229,000	68
Workers with LMIA	109,000	32
Total	338,000	100.0

 $Sources: \ Citizenship \ and \ Immigration \ Canada. \ PBO \ calculations.$ 

Foreign workers occupying a position requiring a LMIA represented only 32 per cent of all foreign workers in Canada in 2012. As will be seen in the next section, their share has declined over time.

### 4 Foreign workers in the Canadian labour force, 2002-2012

This section examines the number and activities of foreign workers in the Canadian labour force. Since this report focuses more on trends than on short-term fluctuations, it presents a snapshot of foreign workers present as of December 1 of each year.

It is recognized that this measure is an imperfect gauge of the relative importance of foreign workers in the Canadian labour force since it is possible that many who entered it during the year have already left on December 1, for example, agricultural workers. Nevertheless, there is no reason to believe that this would cloud the underlying trend this measure provides.

Moreover, we focus on the period beginning in 2002, when the *Pilot Project for occupations requiring lower Levels of Formal Training* was formally introduced, as discussed in section 2.<sup>14</sup> It is useful to

<sup>&</sup>lt;sup>11</sup> In the case of lower-skilled occupations, foreign workers can be hired for a maximum of 24 months.

<sup>12</sup> Please see

<sup>&</sup>lt;sup>13</sup> See <a href="http://news.gc.ca/web/article-en.do?nid=859859">http://news.gc.ca/web/article-en.do?nid=859859</a>, consulted in November 2014.

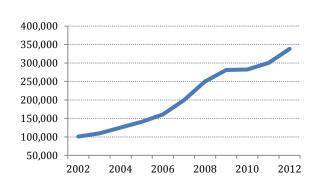
 $<sup>^{14}</sup>$  Growth in the number of foreign workers was also faster post-2002. From 1988 to 2002, the number of foreign workers present on December  $1^{\rm st}$  went from 76,300 to 101,000, an increase of a little over 2 per cent

divide the sample into two periods: up to the 2009 recession (2002-2009) and post-recession (2009-2012). Data suggest some changes in behaviour following the recession.

### 4.1 Foreign workers: Quantitative importance and regional distribution

Figure 4-1 illustrates the steady increase in the number of foreign workers in Canada as of December 1 over the sample period. Between 2002 and 2012, the number of foreign workers in Canada increased more than three-fold from just over 100,000 to 338,000, with a pause only in 2009 during the recession.

Figure 4-1: Foreign workers present on December 1, Canada, 2002-2012



Sources: Citizenship and Immigration Canada. PBO calculations.

For some perspective on the potential influence of foreign workers on Canadian labour market conditions, it is relevant to look at their relative importance in the labour force. Figure 4-2 illustrates

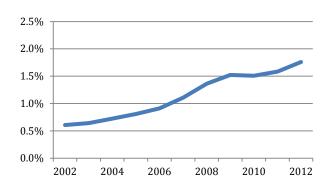
per year. From 2002 to 2012, it went from 101,000 to 338,200, an increase of close to 13 per cent per year (Citizenship and Immigration Canada *Facts and Figures 2012*, PBO calculations.).

the number of foreign workers relative to the yearly labour force. <sup>15</sup>

Between 2002 and 2012, the share of foreign workers in the labour force tripled, from 0.6% to 1.8%. While still a small fraction of the labour force, the upward trend in their relative share points to an increasing influence over labour market conditions.

Figure 4-2 also shows that the growth in the number of foreign workers was faster than the growth in the general labour force. This observation will prove important in section 5 when we discuss the use of foreign workers in low-skilled occupations.

Figure 4-2: Foreign workers as a share of Canadian labour force, 2002-2012, percentage (%)



Sources: Citizenship and Immigration Canada. Statistics Canada CANSIM table 282-0002. PBO calculations.

Provincially, most foreign workers reside in Alberta, British Columbia, Ontario or Quebec, although the share of foreign workers residing in other provinces or territories has grown over the last decade (Table 4-3).

From 2002 to 2012, more than 90 per cent of foreign workers entered these four provinces, quite in line with their share of the Canadian labour force (87 per cent).

<sup>&</sup>lt;sup>15</sup> Figure 4-2 excludes data for Yukon, Northwest Territories and Nunavut since these territories are not included in national totals.

Table 4-3: Distribution of foreign workers by province of residence, 2002 and 2012

	2002		201	12
	% of FW % of LF		% of FW	% of LF
AB	10.6	10.7	20.2	11.9
ВС	19.1	12.9	21.9	13.1
ON	49.9	39.2	35.5	39.0
QC	13.7	23.6	13.0	22.9
Others	6.7	13.9	9.4	13.4

FW means foreign workers. LF means labour force.

Sources: Citizenship and Immigration Canada. Statistics Canada CANSIM table 282-0002. PBO calculations.

In 2002, British Columbia and Ontario were relatively intensive users of foreign workers as their share was quite larger than their share of the labour force; Quebec experienced the opposite situation.

A decade later, Alberta had replaced Ontario in the category of intensive users. In fact, Alberta and British Columbia were the only provinces for which the 2012 share of foreign workers in the labour force was higher than the national average (Table 4-4).

However, while this share increased fivefold in Alberta between 2002 and 2012, it is noteworthy that Prince Edward Island, New Brunswick and Saskatchewan all experienced larger increases than Alberta during the same period.

On the other hand, these three provinces had very few foreign workers initially. By 2012, their combined total of foreign workers (13,500)<sup>16</sup> was still less than one-fifth of the 68,300 foreign workers in Alberta.

<sup>16</sup> The number of foreign workers per province is not shown in this report, although the numbers are easily available in Citizenship and Immigration Canada's *Facts and Figures* publication.

Table 4-4: Foreign workers as a share of provincial labour forces, 2002-2012

	2002 2009 2012		growth <sup>17</sup>	
		%		02-12
NL	0.41	0.59	0.97	2.34
PEI	0.19	0.82	1.36	7.27
NS	0.30	0.65	0.87	2.92
NB	0.13	0.59	0.74	5.52
QC	0.35	0.73	1.02	2.88
ON	0.78	1.32	1.63	2.10
MB	0.33	0.87	0.84	2.57
SK	0.29	1.09	1.66	5.67
AB	0.61	3.03	3.03	5.01
ВС	0.90	2.87	2.99	3.31
Canada	0.61	1.52	1.79	2.94

Sources: Citizenship and Immigration Canada. Statistics Canada CANSIM table 282-0002. PBO calculations.

Moreover, and perhaps contrary to what many might expect, it appears that foreign workers were important not just in large census metropolitan areas (CMA). <sup>18</sup> Table B-1 in Appendix B presents the share of foreign workers for all 24 urban areas for which data were available from 2002 to 2012.

Of these, only five CMAs had a share of foreign workers in the labour force that equaled or surpassed the national average, namely Toronto, Regina, Calgary, Edmonton and Vancouver.

Nationally, only nine CMAs had a share of foreign workers that surpassed 1 per cent. In Calgary, Edmonton and Vancouver, the share of foreign workers was actually lower than the respective provincial average. This suggests that in some smaller centres, the share of foreign worker in the labour

100,000 of which 50,000 live in the urban core.

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 <sup>17</sup> For clarity, this is the growth factor between 2002 and 2012. This column is calculated as the share in 2012 divided by the share in 2002.
 18 A CMA is formed by one or more adjacent neighbouring municipalities centered on an urban core. CMAs must have a total population of at least

force could be much larger than 3 per cent and that many of those would be in Alberta or British Columbia. <sup>19</sup> Section 5 investigates this point more thoroughly.

### 4.2 Occupational skill level of foreign workers

It is also relevant to examine the type of positions these foreign workers occupied. Table 4-5 shows how foreign workers are distributed according to their occupational skill level (Box 4-1), as well as the average annual growth rate for each category.

Between 2002 and 2012, the number of foreign workers in skilled occupations increased 8.7 per cent a year on average, similar to the 9.1 per cent annual average increase in foreign workers occupying low-skilled positions.

### Box 4-1: Occupational skill level vs worker's skill level

The occupational skill level represents the appropriate level of schooling and/or work experience required to perform the duties of a given position.

The Government of Canada uses a system called National Occupational Classification (NOC) to classify jobs based on the type of work a person does and the types of job duties. <sup>20</sup> This is how the *occupational skill level* of a position is determined. There are 5 main occupational skill levels:

- 1. Skill level 0 management jobs;
- 2. Skill level A professional jobs, which typically require a university degree;
- 3. Skill level B technical and skilled trades, which typically require two to three years of post-secondary education, or two to five years of apprenticeship

- training, or three to four years of secondary school and more than two years of on-the-job training;
- 4. Skill level C intermediate and clerical, which typically require one to four years of secondary school education, or up to two years of on-the-job training, training courses or specific work experience;
- 5. Skill level D elemental and labourers, which typically have no formal educational requirements, short work demonstration or on-the-job training.

Type 0, A or B jobs are generally considered "skilled" occupations while jobs classified as C or D are generally considered "lower-skilled" occupations. A detailed description of the various occupational skill levels can be found in the Citizenship and Immigration Canada's Facts and figures 2012: Immigration overview – Permanent and temporary residents.

The occupational skill level has to be distinguished from a worker's skill level, which represents the educational level achieved by a worker. A worker with a university degree would be considered a skilled worker, although that worker could be employed in a low-skilled occupation. On the other hand, it would usually be harder for a low-skilled worker to be employed in a skilled occupation.

Prior to the 2009 recession, however, the growth in low-skilled positions (+16.7 per cent) was much more robust than the 9.7 per cent growth in skilled positions. By 2009, foreign workers in low-skilled occupations had outnumbered those in skilled occupations.

<sup>&</sup>lt;sup>19</sup> It is not possible to calculate the share of foreign workers in smaller urban centres, as Statistics Canada does not compile reliable labour force data for these smaller centres.

<sup>&</sup>lt;sup>20</sup> http://www.cic.gc.ca/english/immigrate/skilled/noc.asp, consulted in October 2014.

Table 4-5: Foreign workers present on December 1 by occupational skill level

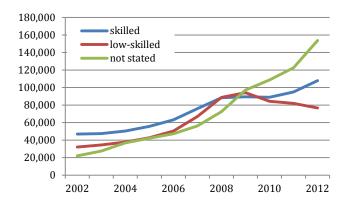
	# of workers			
	2002	2009	2012	
Level 0	8,857	14,538	18,637	
Level A	27,929	40,746	47,581	
Level B	10,101	34,186	41,616	
Level C	31,641	70,942	58,245	
Level D	408	23,290	18,466	
Skilled	46,887	89,470	107,834	
Low skilled	32,049	94,232	76,711	
Not stated	22,154	97,044	153,668	
Total	101,098	280,750	338,221	

	_	_		
	02-12	02-09	09-12	
Level 0	7.7	7.3	8.6	
Level A	5.5	5.5	5.3	
Level B	15.2	19.0	6.8	
Level C	6.3	12.2	-6.4	
Level D	46.4	78.2	-7.4	
Skilled	8.7	9.7	6.4	
Low skilled	9.1	16.7	-6.6	
Not stated	21.4	23.5	16.6	
Total	12.8	15.7	6.4	

Sources: Citizenship and Immigration Canada. PBO calculations.

Since the recession, the number of foreign workers in low-skilled positions has been on a downward trend, while growth in skilled occupations has continued but at a somewhat slower pace

Figure 4-6: Foreign workers present on December 1 by occupational skill level



Sources: Citizenship and Immigration Canada. PBO calculations.

This might appear surprising at first glance, considering that in all likelihood, essentially all unemployed Canadian workers would possess the minimum skill level required to perform successfully in these positions. As such, employers should be capable of finding suitable Canadian candidates for these positions.

Understanding why Canadian employers sometimes fill these positions with foreign nationals instead of Canadian workers is important because it could influence how policymakers analyze the labour market and how they correct perceived imperfections.

A noteworthy feature of Table 4-5 is that the strongest growth in the number of foreign workers was among those for whom the occupational skill level was not known. This is true over the entire sample period as well as for both sub-periods.

In fact, while foreign workers whose occupational skill was not reported represented only 22 per cent of all foreign workers in 2002, their share had more than doubled to 45 per cent by 2012.

To better understand the significant growth in this category of foreign workers, it is worth remembering from Section 2 that foreign workers can enter the Canadian labour market under various programs, only some of which require an LMIA.

For many of those not requiring an LMIA, the occupational skill level would not be registered because workers can obtain an open work permit. Thus, it is not known what position they occupy.

Table 4-7 shows how the various streams of foreign workers have evolved since 2002 and complements the data in Table 3-1. While the number of foreign workers with and without an LMIA was roughly equal in 2002, LMIA-exempt workers represented a large majority in 2012, as mentioned in section 3.

Table 4-7: Foreign workers present on December 1 by LMIA requirement.

	2002	2009	2012
	#	f of worker	s
w/o LMIA	52,589	138,603	229,257
Int'l arrangements	16,215	22,465	41,261
Canadian interests	35,633	113,789	180,877
Other w/o LMIA	741	2,349	7,119
with LMIA	48,509	102,164	108,964
Total	101,098	240,767	338,221

	% of total					
w/o LMIA	52.0 57.6 67.8					
Int'l arrangements	16.0	9.3	12.2			
Canadian interests	35.2 47.3 53.5					
Other w/o LMIA	0.7 1.0 2.1					
with LMIA	48.0 42.4 32.2					
Total	100.0 100.0 100.0					

Sources: Citizenship and Immigration Canada. PBO calculations.

Table 4-7 also shows that the number of foreign workers increased in all categories; however, growth was particularly robust among foreign workers contributing to Canada's interests. In fact, as a share of total foreign workers, they are well above workers requiring an LMIA.

While the rest of this report will focus on workers for whom the occupational skill level is known, Annex A delves deeper into the category of foreign workers contributing to Canada's interests. The analysis makes some inferences about the skill level of the workers under this umbrella, as well as the likely occupational skill level of the position they occupy.

Focusing only on foreign workers for whom the occupational skill level is known, we note significant variance provincially in the distribution of foreign workers between skilled occupations and low-skilled occupations.

Table 4-3 already showed that Alberta and British Columbia were intensive users of foreign workers, welcoming more foreign workers than their share of the Canadian labour force would suggest. Table 4-8 shows that this was particularly true of foreign workers in low-skilled occupations.

By 2011<sup>21</sup>, Alberta and British Columbia combined had 42 per cent of foreign workers in low-skilled occupations, while they accounted for roughly 25 per cent of the labour force. This was also the case for skilled workers. But what really stands out is the extent to which the share of foreign workers in low-skilled occupations in these two provinces had increased during the previous decade.

 $<sup>^{21}</sup>$  At the provincial level, data on the number of foreign workers present on December 1st by occupational skill level are publicly available until 2011 only.

In 2002, Alberta and British Columbia had less than 20 per cent of foreign workers in low-skilled occupations. By the 2009 recession, this proportion had jumped to nearly 50 per cent. Since then, the trend has reversed slightly, particularly in Alberta.

Table 4-8: Provincial distribution of foreign workers by occupational skill level, percentage (%)

Low- Skilled	2002	2009	2011
AB	7.5	32.0	26.6
ВС	9.2	16.7	15.4
ON	68.2	39.2	42.3
QC	12.1	6.8	8.9
Others	3.0	5.3	6.8
Skilled			
AB	11.7	24.4	23.9
ВС	14.2	18.5	15.9
ON	47.4	34.2	34.7
QC	16.8	12.9	15.3
Others	9.8	10.1	10.3

Sources: Citizenship and Immigration Canada. PBO calculations.

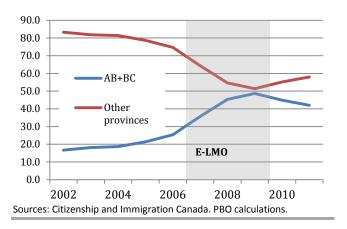
In fact, it was really between 2007 and 2009 that Alberta and British Columbia experienced a large influx of foreign workers in low-skilled occupations, as shown by Figure 4-9.

This increase is explained by the introduction, in September 2007, of the Expedited Labour Market Opinion (E-LMO) Pilot Project in Alberta and British Columbia to provide expedited LMIA processing to employers seeking to hire temporary foreign workers in high-demand occupations at a time when these two provinces were experiencing the highest rates of economic growth among Canadian provinces, besides Newfoundland and Labrador.

The purpose of the E-LMO pilot project was to eliminate LMIA processing backlogs in these two

provinces. Many of the jobs covered under this pilot project, which ended in 2010, were for low-skilled occupations. Gross (2014) discusses the E-LMO initiative in more detail.

Figure 4-9 Provincial distribution of foreign workers in low-skilled occupations, 2002-2011, percentage (%)



These observations lead to an important question: Why do Canadian employers need to rely on foreign workers to fill low-skilled positions, when there are ample unemployed Canadians who have the minimum skill level required to meet labour demand?<sup>22</sup>

Some insights may potentially be garnered by looking in more details into the labour markets of Alberta, British Columbia and Ontario which combined account for 85 per cent of the demand for foreign workers in low-skilled occupations. Most of these foreign workers would be in the country at the initiative of Canadian employers (Appendix A).

 $<sup>^{22}</sup>$  In 2013, there were 1.27 million unemployed Canadians for likely less than 120,000 foreign workers in low-skilled occupations, including those for which the occupational skill level is not known.

## 5 Low-skilled labour force and low-skilled occupations

To improve our understanding of the use of foreign workers in lower-skilled occupations in Alberta, British-Columbia and Ontario, we first consider the positions they occupy. Employment and Social Development Canada's annual LMIAs statistics by top occupational groups<sup>23</sup> shows that since 2005, all three provinces had significant demand for babysitters, nannies and parent's helpers (NOC 6474). In Ontario, there was also significant demand for general farm workers (NOC 8431) and nursery and greenhouse workers (NOC 8432). In British Columbia, there was strong demand for harvesting labourers (NOC 8611) while in Alberta, it was mostly for food counter attendants, kitchen helpers and related occupations (NOC 6641) and light duty cleaners (NOC 6661).<sup>24</sup> These same occupations are also the 5 most highly demanded at the national level since 2007. 25 Moreover, they are all occupations in the low-end of the pay scale, with median wage below \$14 per hours.<sup>26</sup>

Interestingly, for all three provinces, a very small number of lower-skill occupations made up a significant share of all LMIA approved position since 2007. In Alberta, an average of 30 percent of all LMIA positions approved were for 1) babysitters, nannies and parent's helpers, 2) food counter attendants, kitchen helpers and related occupations and 3) light duty cleaners. In British Columbia, 1) babysitters,

nannies and parent's helpers and 2) harvesting labourers represented an average of 34 per cent of all LMIA positions approved while in Ontario 60 per cent of approved positions were for 1) babysitters, nannies and parent's helpers, 2) general farm workers and 3) nursery and greenhouse workers.

As discussed at the beginning of Section 2, job creation can be envisioned as the result of a matching process in which firms open vacancies, workers look for jobs and given sufficient time and appropriate wage offers, vacancies are matched with suitable workers. When vacancies remain unfilled, the compensation offered is expected to increase, contingent on the ability of firms to increase their own selling price to remain profitable. If compensation does not increase, the vacancies will remain unfilled unless the pool of available workers is enlarged, for example through the use of programs allowing temporary foreign workers.

The nature of the positions occupied by many of the foreign workers in lower skilled positions in Alberta, British Columbia and Ontario suggests that employers may have resisted increasing the compensation package offered to attract domestic workers.

In the agricultural sector, the price of many products is determined in international markets or is determined in markets facing intense international competition, for example the wine industry. In the case of foreign workers working as *babysitters*, nannies and parent's helpers, they would often be hired by individual families, for example through the Live-in Caregivers program. At prevailing wages,

http://www.esdc.gc.ca/eng/jobs/foreign workers/lmo statistics/annual-top-occs.shtml, consulted in January 2015.

http://www30.hrsdc.gc.ca/NOC/English/NOC/2006/Welcome.aspx, consulted in January 2015.

http://www.jobbank.gc.ca/home-eng.do, consulted in January 2015.

<sup>23</sup> 

<sup>&</sup>lt;sup>24</sup> To obtain a quick description of each of these occupations, consult the quick search feature of the National Occupational Classification 2006 webpage at

The exception is Light duty cleaners, which is in the top 10 position.
 Data on median wage per occupation code is from

many of these families might already be facing some financial stress.<sup>27</sup>

If indeed employers in these provinces faced limited ability to raise compensation for positions in lower-skilled occupations, their capacity to fill these vacancies depended essentially on the pool of "suitable" workers available, namely the lower-skilled labour force.<sup>28</sup>

Indeed, an important factor contributing to the survival of jobs created is the appropriate match between the skill requirement of the positions and the skill level of workers looking for or filling these positions. One would normally expect skilled positions to be filled by skilled workers and low-skilled positions to be filled primarily by lower-skilled workers.

Of course, it is possible for a skilled worker to fill a low-skilled position, given she/he will typically meet the minimum skill requirements. This is a situation called *underemployment* in the economic literature (see Box 5-1). From the point of view of employers, however, this might be a costly situation in terms of search and training costs for new employees.

### Box 5-1: What is underemployment?

The notion of *underemployment* is found in many social science fields, including labour economics, education, sociology and management. Underemployment has different conceptualizations, including being overeducated, over-skilled, over-experienced, working in a field unrelated to one's area of education, holding a part-time job when one wants to work full time, or earning significantly less than wages earned in previous employment (Erdogan 2012).

Empirical research suggests that workers in underemployed positions (whether real or perceived) typically experience lower job satisfaction and organizational commitment, such as being late or absent, as well as higher turnover intentions.<sup>29</sup>

For employers, this means that underemployed workers are potentially more likely to quit their job early into their tenure, increasing the frequency with which firms have to search, hire and train new workers. This is costly in terms of search efforts and potential mistakes made during training periods, as well as reduced output. Incidentally, the difficulty in retaining Canadian workers is often cited by employers as a reason that they prefer to rely on foreign workers to fill low-skilled positions. The form their point of view, the use of temporary foreign workers subject to an LMIA is an attractive option because it "ties" the worker to the firm through an employer-specific work permit, up to a period of two years.

A recent study on worker reallocation by Statistics Canada (2013) brings anecdotal evidence suggesting that high turnover might play a role in the decision of firms to hire foreign workers in lower-skill occupations.

<sup>&</sup>lt;sup>27</sup> The Live-in Caregivers program itself might have some design issues that could have resulted in inflated statistics. See for example <a href="http://www.theglobeandmail.com/news/politics/live-in-caregivers-may-be-next-target-of-immigration-reform/article19304029/">http://www.theglobeandmail.com/news/politics/live-in-caregivers-may-be-next-target-of-immigration-reform/article19304029/</a>, consulted in January 2015.

<sup>&</sup>lt;sup>28</sup> While the lower-skilled labour force, whether employed or unemployed, represent the natural pool from which to fill lowers-skilled positions, the fact that employers could not fill some of their positions with domestic workers suggests that at current level of proposed compensation, they were not able to attract lower-skilled employed workers. Thus, it is likely that the actual pool from which they could find workers would be further limited to lower-skilled unemployed workers.

 $<sup>^{29}</sup>$  See for example Maynard *et al.* (2006) or Erdogan and Bauer (2011).

<sup>&</sup>lt;sup>30</sup> As an example, see

http://www.theglobeandmail.com/news/national/first-nations-coming-second-to-temporary-foreign-workers/article21084696/, consulted in January 2015.

Statistics Canada's study investigates worker reallocation rates along various dimensions (see Box 5-2). The study looks at average rates over the 2000 to 2008 period. Of note, the sample ends just a year after the introduction of the E-LMO pilot project in September 2007. As such, the findings of Statistics Canada reflect for the most part the conditions that were prevailing before the important influx of foreign workers in Alberta and British Columbia after 2007.

Three findings of Statistics Canada's study are particularly relevant for this report. First, industries with lower hourly wages typically experience higher reallocation rates. Second, separation rates were much higher for low-skilled workers than for workers who had achieved at least a high school education. This is not surprising, given that lower-skilled workers typically attract lower wages. Third, Statistics Canada found that the industrial sectors experiencing the highest separation rates were 1) accommodation and food services, 2) agriculture, forestry, and fishing and hunting, 3) retail trade, 4) construction and 5) other industries.

#### Box 5-2: What is the worker reallocation rate?

The worker reallocation rate captures the degree to which workers move into firms or separate from firms (Statistics Canada (2013), p.9). It is calculated as the sum of the hiring rate and the separation rate. The *hiring rate* captures movements of workers into firms, while the *separation rate* captures movements of workers out of firms resulting from layoffs, quits, or separations for other reasons.

Consistent with these findings, it is noteworthy that a large number of foreign workers in lower-skill occupations in Alberta, British Columbia and Ontario

were in the agricultural sector as well as in the food services industry. <sup>31</sup>

Compounding the problem of higher separation rate for employers in some lower-skilled occupation is the shrinking of the lower-skilled labour force. Indeed, while developed economies still require many low-skilled positions to be filled, increased access to education and mandatory schooling has resulted in a workforce that is more highly educated than in the past (OECD 2008).

In 2006, for example, Canada's low-skilled labour force represented 14.6 per cent of the total labour force. <sup>32</sup> By 2013, this proportion had declined to 10.7 per cent. Moreover, because of the decline in fertility rates over time, new cohorts entering the labour force every year are generally shrinking. As the OECD (2008) pointed out:

The combined effect of increased attainment levels and shrinking cohorts is to effectively reduce the supply of workers for lesser skilled jobs.

This phenomenon is well observed in Canada. Figure 5-1 illustrates the decline of the Canadian low-skilled labour force, that is, the labour force that has a primary education or attended secondary school but did not complete it. Between 2002 and 2013, it declined 26 per cent.<sup>33</sup>

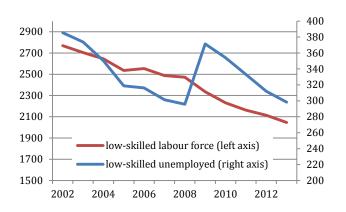
<sup>&</sup>lt;sup>31</sup> In NAICS 2007, foreign workers coming as *Babysitters, nannies and parent's helper,* often under the Live-in caregiver program, would be considered employed by private households in the sector *Other Services (except Public Administration)*. In Statistics Canada's study, this sector would be included in the amalgamated *other industries* sector.

<sup>&</sup>lt;sup>32</sup> As a comparison, this compares to an average of 19.4 per cent for high income OECD countries (OECD 2008).

<sup>&</sup>lt;sup>33</sup> This phenomenon began well before 2002. In fact, since 1990, the low-skilled labour shrank by 50 per cent while the skilled labour force increased 66 per cent.

This definition of lower skilled labour force matches well the concept used by OECD (2008), namely those workers whose education level is less than upper secondary. Moreover, it is possible to link it to the definition of lower-skilled occupations in the National Occupational Classification system (Box 4-1).

Figure 5-1 Low-skilled labour force and low-skilled unemployed, Canada, 2002-2013, (x 1,000)

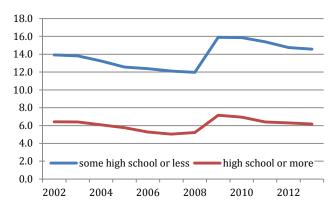


Lower-skilled labour force is the sum of the labour force that has 0 to 8 years of education and the labour force that has some high school.

Sources: Statistics Canada Cansim Table 202-0004. PBO calculations.

Moreover, while low-skilled workers experienced a large increase in unemployment following the recession, their number was essentially back at its pre-recession low by 2013, even though the unemployment rate of lower-skilled workers remained high at the national level. (Figure 5-2).

Figure 5-2 Unemployment rate by educational attainment, Canada, 2002-2013, %



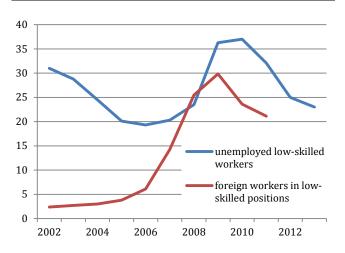
Note: In the figure, some high school or less represent the unemployment rate of low-skilled Canadians.

Source: Statistics Canada Cansim Table 202-0004.

The main consequence of this shrinking of the lowerskilled labour force is that it is potentially harder for employers, at current wages, to find "suitable" candidates, namely candidates whose skill level matches that of the position for which they apply.

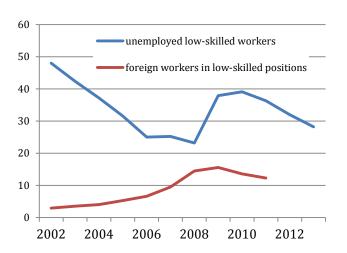
A closer look at provincial data allows one to assess the extent by which this can potentially prove constraining for employers. Figures 5-3 to 5-5 show the number of foreign workers in low-skilled positions in relation to the number of low-skilled unemployed Canadian workers for each of these three provinces. It is important to emphasize that the lack of detailed data on labour supply and labour demand does not allow PBO to draw robust conclusions on whether labour markets are really tight and whether there is a real need for temporary foreign workers for all categories of low-skilled occupations. The analysis below provides indications that in certain regions access to domestic low-skilled workers may have been difficult in the past.

Figure 5-3 Alberta, low-skilled unemployed and foreign workers in low-skilled positions, 2002-2013, (x 1,000)



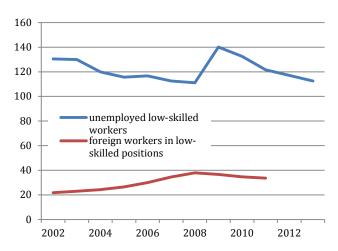
Sources: Citizenship and Immigration Canada. Statistics Canada. PBO calculations.

Figure 5-4 British Columbia, low-skilled unemployed and foreign workers in low-skilled positions, 2002-2013, (x 1,000)



Sources: Citizenship and Immigration Canada. Statistics Canada. PBO calculations.

Figure 5-5 Ontario, low-skilled unemployed and foreign workers in low-skilled positions, 2002-2013, (x 1,000)



Sources: Citizenship and Immigration Canada. Statistics Canada. PBO calculations.

It is interesting to note that in the period up to the 2009 recession, all three provinces were experiencing a decline in the number of low-skilled unemployed Canadian workers; the decline was particularly rapid (proportionally speaking) in Alberta and British Columbia.

Moreover, by 2013, the number of low-skilled unemployed workers in all three provinces had returned to the pre-recession low. It is also noteworthy that the number of foreign workers has been declining following the recession, although updated data could show that the downward trend has reversed after 2011, the last year for which provincial data points are publicly available.

It is noteworthy that by the time the recession hit, there were more foreign workers in low-skilled positions in Alberta than there were low-skilled unemployed domestic workers, the natural pool from which to fill these positions. Had all these low-skilled positions been occupied by low-skilled

unemployed domestic workers, the province might have ended up with a tight labour market.

In British Columbia, the situation was similar but to a lesser degree. By 2008, there were just 1.6 low-skilled unemployed domestic workers for every low-skilled position filled by a foreign worker.

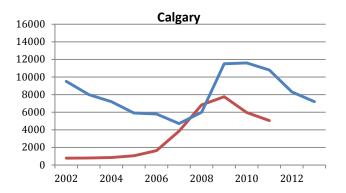
In the case of Ontario, it is less clear why there was a continuous increase in the number of foreign workers occupying low-skilled positions in the run-up to the recession. Data show that even at its pre-recession low, there were still three low-skilled unemployed domestic workers for each low-skilled position filled by a foreign worker. Moreover, the province was experiencing the second lowest separation rates among all Canadian provinces.

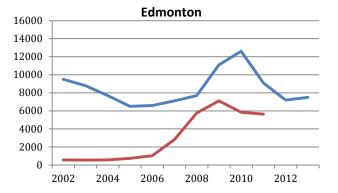
The process of filling an open vacancy is harder to achieve when there is a geographical gap between the location of open vacancies and the location of available workers. This is particularly true for low-skilled jobs which tend to be more precarious and to offer lower wages, reducing the benefits of relocating relative to the cost of moving one's family.

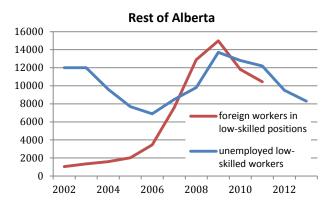
To investigate this issue further, we look at how foreign workers are distributed within each province. Figure 5-6 presents the same information as figure 5-3, with an emphasis on Alberta's local labour markets.<sup>34</sup>

<sup>34</sup> Local breakdown is dictated by the availability of labour market data at the regional level for each province as provided by Statistics Canada.

Figure 5-6 Alberta, low-skilled unemployed and foreign workers in low-skilled positions, local markets, 2002-2013



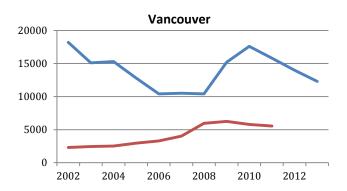


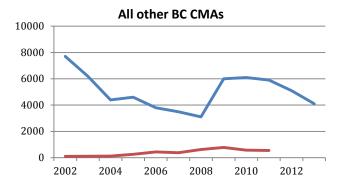


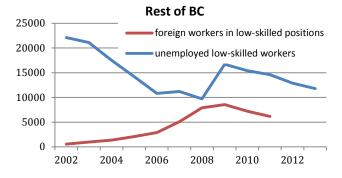
Sources: Citizenship and Immigration Canada. Statistics Canada. PBO calculations.

While there are generally more unemployed lowskilled workers than temporary foreign workers low skilled positions in Edmonton and Calgary, the province's smaller cities are experiencing the opposite situation. It is perhaps not surprising, then, that more than half of the foreign workers in the province reside outside Calgary and Edmonton.

Figure 5-7 British BRITISH COLUMBIAColumbia, lowskilled unemployed and foreign workers in lowskilled positions, local markets, 2002-2013







All other CMAs include Abbotsford, Kelowna and Victoria.

Sources: Citizenship and Immigration Canada. Statistics Canada. PBO calculations.

It is possible that improvements in sharing information about open vacancies could partly mitigate the need to rely on foreign workers in Edmonton. Lower-skilled positions could be filled by lower-skilled workers from other locations if there are appropriate incentives, like higher compensation.

British Columbia's situation resembles that in Alberta. In smaller cities, the number of foreign workers in low-skilled positions was essentially equal to the number of low-skilled unemployed workers.

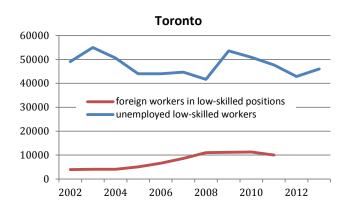
Vancouver had fewer than two unemployed lowskilled domestic workers for every low-skilled position occupied by a foreign worker at the onset of the recession.

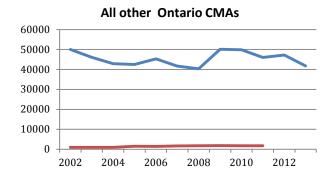
As in the case of Edmonton, it appears that better dissemination of information about job openings in Vancouver could mitigate partly the need to rely on foreign workers in the city. Other British Columbia CMAs (Abbotsford, Kelowna and Victoria) made little use of foreign workers.

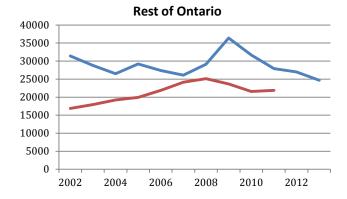
In Ontario, essentially all foreign workers in lowskilled positions (95 per cent) are either in Toronto or in smaller centres that are not CMAs. In smaller centres, the number of foreign workers in low-skilled occupations was about equal to the number of lowskilled unemployed Ontarian workers.

Unlike Edmonton and Vancouver, it is harder to understand why there were more than 10,000 foreign workers occupying low-skilled positions in Toronto in 2011, considering that even at the peak of the economic cycle there were still about four low-skilled unemployed domestic workers to fill each of these positions. However, Toronto is a very large urban centre, which can potentially create unique challenges in matching workers and vacancies, for example in terms of commute time.

Figure 5-8 Ontario, low-skilled unemployed and foreign workers in low-skilled positions, local markets, 2002-2013







All other CMAs include Ottawa, Kingston, Greater Sudbury, Peterborough, Oshawa, Hamilton, St. Catharines & Niagara, Brantford, Guelph, London, Windsor, Barrie, Kitchener and Thunder Bay.

 $\it Sources: Citizenship and Immigration Canada. Statistics Canada. PBO calculations.$ 

The main conclusion of these observations is that in the short run, based on partial information, there is an appearance of tightness in the market for lowerskilled positions in Alberta and in smaller centres in British Columbia and Ontario.<sup>35</sup>

However, one could argue that access to foreign workers unduly delays, on the part of the firms, the required productivity-enhancing investments that would allow them to offer higher compensation to attract domestic workers while mitigating price increases. Thus, it is important that the policy parameters of the Temporary Foreign Worker Program are designed such that firms find it more profitable, ultimately, to rely on the domestic labour force than on foreign workers.

<sup>&</sup>lt;sup>35</sup> It is possible that changes introduced in June 2014 to the Temporary Foreign Worker Program might be detrimental to these regions because the changes target significantly low-paid, lower-skilled occupations. In fact, one can conjecture that the changes will affect Alberta proportionally more, as well as employers in the accommodation and food services sector. Indeed, the changes introduced are not applicable to employers who are hiring foreign workers for positions related to onfarm agriculture, which represent an important share of the demand from firms in British Columbia and Ontario.

#### References

- Erdogan, Berrin, & Bauer, Talya. (2011). The Impact of Underemployment on Turnover and Career Trajectories. In D. Maynard, & D. Feldman, *Erdogan and Bauer* (pp. 215-232). Springer.
- Gross, D. M. (2014). *Temporary Foreign Workers in Canada*. C.D. Howe Institute, Commentary No. 407.
- Gross, D. M., & Schmitt, N. (2012). *Temporary*Foreign Workers and Regional Labour Market

  Disparities in Canada. Canadian Public Policy,

  Vol. XXXVIII, No. 2,.

- Maynard, D., Joseph, T., & Maynard, A. (2006).

  Underemployment, job attitudes and turnover intentions. *Journal of Organizational Behaviour, vol 27*, 509-536.
- Morissette, R., Lu, U., & Qiu, T. (2013). Worker Reallocation in Canada. *Analytical Studies Branch Research Paper, Statistics Canada*.
- OECD. (2008). Management of Low-Skilled Labour Migration. *International Migration Outlook* 2008, OECD Publishing.

# Appendix A Summary Characteristics of Temporary Foreign Workers Program and International Mobility Program

### **Table A-1 Temporary Foreign Worker Program and International Mobility Program**

Temporary Foreign Worker Program Objective:  Last resort for employers to fill jobs for  0.which qualified Canadians are not  available	International Mobility Programs Objective: To advance Canada's broad economic and cultural national interest
Based on employer demand to fill specific jobs	Not based on employer demand
Unilateral and discretionary	Base largely on multilateral/bilateral agreements with other countries (e.g. NAFTA, GATS)
Employer must pass Labour Market Impact Assessment (formerly LMO)	No Labour Market Impact Assessment required
Lead department ESDC	Lead department CIC
No reciprocity	Based largely on reciprocity
Employer-specific work permits (TFWs tied to one employer)	Generally open permits (participants have greater mobility)
Majority are low-skilled (e.g. farm workers)	Majority are high skill / high wage
Last and limited resort because no Canadians are available	Workers & reciprocity are deemed to be in the national economic and cultural interest
Main source countries are developing countries	Main source countries are highly developed

Source: ESDC (2014). See <a href="http://www.esdc.gc.ca/eng/jobs/foreign\_workers/reform/index.shtml">http://www.esdc.gc.ca/eng/jobs/foreign\_workers/reform/index.shtml</a>, under *Read more*, consulted in November 2014

### Appendix B

Table B-1 Foreign workers as a share of local labour forces, Census Metropolitan Areas, 2002-2012

	2002	2009	2012
		%	
St. John's, NFL	0.26	0.35	0.40
Halifax, NS	0.52	0.88	1.08
Moncton, NB	0.12	0.51	0.77
Saint John, NB	0.14	0.53	0.34
Québec, QC	0.18	0.37	0.48
Sherbrooke,QC	0.17	0.31	0.49
Montréal, QC	0.57	1.08	1.57
Ottawa-Gatineau, ON & QC	0.51	0.64	0.75
Kingston, ON	0.14	0.24	0.29
Oshawa, ON	0.28	0.33	0.34
Toronto, ON	0.65	1.42	1.95
Hamilton, ON	0.26	0.48	0.59
St. Catharines-Niagara, ON	0.26	0.43	0.52
Kitchener-Cambridge-Waterloo, ON	0.26	0.47	0.59
London, ON	0.31	0.56	0.68
Windsor, ON	0.68	0.36	0.92
Greater Sudbury, ON	0.13	0.34	0.46
Winnipeg, MB	0.32	0.64	0.68
Regina, SK	0.29	1.11	1.78
Saskatoon, SK	0.37	1.31	1.55
Calgary, AB	0.67	2.64	2.76
Edmonton, AB	0.46	2.30	2.45
Kelowna, BC	0.25	1.35	1.09
Abbotsford-Mission, BC	0.17	0.57	0.54
Vancouver, BC	1.20	2.92	2.46
Victoria, BC	0.19	0.33	0.33
Canada Sources: PBO, CIC, Statistics Canada	0.61	1.52	1.79

#### Annex A

### Foreign workers contributing to Canada's interests

As mentioned in section 4 of the main report, foreign workers entering the Canadian labour force because they contribute to "Canada's interests" represented the single most important growth component of the number of foreign workers in Canada. In 2012, they were the most important category of foreign workers in the country.

In fact, the term "Canada's interests" is an umbrella name that encompasses five sub-groups: 1) foreign workers bringing employment benefit, 2) foreign workers under reciprocal employment arrangements, 3) spouse/common law partners of foreign nationals in Canada, 4) research and studies related foreign workers and 5) foreign workers performing charitable or religious work.

A more detailed description of these categories as well as guidelines used to evaluate foreign workers under this umbrella can be found on *Citizenship and Immigration Canada*'s website.<sup>36</sup>

Table A-1 shows how foreign workers contributing to Canada's interests are distributed among the five categories. From 2002 to 2012, the number of foreign workers contributing to Canada's interests increased by 145,000, almost 50 per cent (67,000) of whom arrived in Canada after the 2009 recession.

The most significant contributors to this growth were foreign workers entering under the *International Experience Canada* (IEC) program (50,000). However, growth under this program was much faster before

the 2009 recession (20.5 per cent average annual growth) than after (8.5 per cent annual growth).

Table A-1 TFW present on December 1<sup>st</sup>, Canadian interests

	2002	2009	2012
Youth exchange program	13,360	49,325	63,680
Reciprocal employment	2,321	2,218	2,846
Exchange professor	697	1,297	1,568
Reciprocal employment	16,378	52,840	68,094
Intra-company transfers	3,488	10,348	14,925
Significant benefit	2,494	2,573	21,413
Entrepreneur/self-employed	378	362	399
Emergency repairs	204	44	56
Employment benefit	6,564	13,327	36,793
Spouse of foreign worker	3,387	19,373	24,313
Spouse of foreign student	2,099	3,965	5,074
Spouse	5,486	23,338	29,387
Post-graduate employment	988	14,436	31,316
Post-doctoral fellow and award recipients	3,863	4,880	5,513
Research, educational, training	472	3,530	7,954
Research related	5,323	22,846	44,783
Charitable or religious work	968	1,438	1,820
Repair and service equipment	914	-	-
Other Canadian interests	1,882	1,438	1,820
Canadian interests	35,633	113,789	180,877

In the table, the term spouse encompasses common law partners.

Sources: Citizenship and Immigration Canada. PBO calculations.

The mission of the IEC is to foster bilateral relations between Canada and other nations through a travel and work experience abroad.<sup>37</sup> Foreign workers

http://www.cic.gc.ca/english/resources/tools/temp/work/opinion/index.asp, consulted in October 2014.

 $<sup>^{\</sup>rm 37}$  More details on the International Experience Canada program can be found at

http://www.cic.gc.ca/english/resources/tools/temp/work/opinion/experience/index.asp, consulted in September 2014.

under this program, generally aged between 18 and 35, can have either an open or an employer specific work permit and have a variety of skill sets.

Another significant contributor are those foreign workers entering the Canadian labour force for research related reasons (+40,000), mostly for postgraduate employment. This suggests that these are skilled workers occupying skilled positions in universities or research institutes.

The last significant group of workers that experienced strong growth are those providing employment benefits to the Canadian economy (+30,000). These include foreign workers under intracompany transfers and those providing *significant benefits*. While growth in intra-company transfers has been fairly constant between 2002and 2012, most of the growth in foreign workers providing significant benefits happened in the period since the 2009 recession.

Significant benefits are assessed by Citizenship and Immigration Canada. The guidelines for this assessment<sup>38</sup> suggest that they would generally be workers with significant achievements in their field and thus likely to be considered skilled workers in skilled occupations.

Nevertheless, Citizenship and Immigration Canada mentioned that this code encompasses two other groups of foreign workers. First, it is used for live-in caregivers who have completed their work requirement and have applied for permanent residence. Second, the code is used to provide 'bridge' work permits for applicants destined for permanent residence but whose permanent residence applications have not yet been approved.

On balance, it appears reasonable to assume that a significant portion of those workers for which the occupational skill level is not stated in Table 4-5 would be classified as skilled workers. Consequently, one would have to conclude that a clear majority of foreign workers present in Canada are skilled workers and that they represent the majority of the growth since 2002.

<sup>&</sup>lt;sup>38</sup> These guidelines can be found at http://www.cic.gc.ca/english/resources/tools/temp/work/opinion/benef it.asp, accessed in September 2014.