

Is Quebec experiencing a labour shortage? How can we know for sure?

The issue of our aging workforce and the difficulties employers face in filling job vacancies has been examined by a host of specialists. Business associations, labour force committees, professional orders and chambers of commerce spend a good deal of time and energy trying to understand the labour market and assess the seriousness of the situation. Are we suffering from a labour shortage? For most observers, the answer is no. Some, however, say a shortage does exist, while others believe that an accurate diagnosis simply isn't possible with the information currently available. How can we know for sure? Here are a few points to help clarify things.

A MARKET UNDER THE MICROSCOPE

Labour market analysts base their assessments on economic data. On the whole, they recognize that our current situation cannot accurately be described as a shortage. However, they do not deny that recruitment is a major challenge for some employers. Last November, a comment on the blog of the Institut de recherche et d'informations socio-économiques (IRIS) underlined the confusion that exists in using terms like *scarcity*, *excess demand*, *recruitment difficulties* and *labour shortage*, an observation shared by labour analysts. Without blaming the whole thing on the misuse of language, it is important to note that certain terms are often used interchangeably, which can distort the general public's view of the situation.

Does a labour shortage exist? The question does not yield easy answers. In fact, the very definition of labour shortage is itself a source of contention. Statistics can be problematic, because even when data is available and reliable, it can be skewed by other factors. Different stakeholders read labour shortage data in different ways, depending on their perspective and bias. In general, observers such as researchers, professors and labour market professionals agree that shortages, when they appear, are rare, very localized and do not last long.

LABOUR SHORTAGE: AN ATTEMPT AT DEFINITION

The Centre d'étude sur l'emploi et la technologie (CETECH) has examined the issue¹ and offers a few markers:

“In economic terms, a labour shortage describes an imbalance in the labour market characterized by an inadequate supply of labour, reflected by persistent job vacancies that result in production losses for businesses, despite the fact that the remuneration and work conditions offered are in line with market values.”

“A labour shortage can appear momentarily for an occupation, but it is a phenomenon that seldom persists. In general, a given occupation (in a given region) is recognized as experiencing a labour shortage when the following indicators appear simultaneously:

- Strong employment growth;
- A very low unemployment rate;
- Extended job vacancies (recruitment difficulties);
- Significant wage increases;
- The absence or lack of replacement workers (e.g. new graduates).”

¹ CETECH, Vargas Benavente, Raphael, «Les pénuries et les raretés de main-d'œuvre au Québec», CETECH Capsules, July 2011 (French only)

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SHORTAGES ARE NOT EASY TO MEASURE...

CETECH-conducted research examining efforts to measure labour shortages in Canada and the United States, and their results show that the task of measuring shortages is not simple. CETECH's study included a look at the work carried out by the Bureau of Labor Statistics (BLS) in the United States in the late 1990s which used three very specific criteria: above-average employment growth, above-average increase in earnings, and below average unemployment. The BLS acknowledged that its results were inconclusive. Reliable data was only available for 68 occupations out of several hundred. What's more, the three criteria mentioned above were met by only seven occupations. Ultimately, only one occupation was shown as experiencing a shortage.

Other studies have been carried out in Quebec, including some in the late 1980s. Several ministries, including the Quebec ministry of labour and Employment and Immigration Canada each published lists identifying occupations that demonstrated "shortages" according to the standards of the day. But these lists were based more on perception than on labour market indicators. Both provincial and federal lists became irrelevant during the deep recession of the early 1990s.

IF AT FIRST YOU DON'T SUCCEED...

Despite the challenges, attempts to measure labour shortages have continued, and the work of CETECH in particular is worth considering.

CETECH designed the Survey on recruitment and employment in Quebec, (EREQ), which it carries out in collaboration with the Institut de la statistique du Québec (ISQ). The survey looks at 7,000 institutions and focuses on "comparing and tracking employment and labour demand in high technology and other sectors on the one hand; and, in highly skilled occupations and less-skilled occupations on the other hand."

The most recent data is from spring 2011, when the number of job vacancies (in all categories), were estimated at 61,690, or 3.1% of jobs in Quebec. Some sectors showed higher vacancies, including computer systems design (6.9%), architecture, engineering and related services (6.4%) and the aerospace products industry (6.4%). In contrast, the lowest numbers were seen in accommodation and food services (2.1%), trade (2.2%) and pharmaceutical products (2.3%). Vacancy rates in finance, insurance and real estate came in at 3.0%.

When examining labour shortages, however, it is more interesting to look at the number of long-term job vacancies. The number of jobs remaining unfilled for four months or more can help us identify the presence of a labour shortage (albeit not with absolute certainty). The data from 2011 showed 14,260 long-term vacancies, or 0.7% of Quebec jobs. As the survey demonstrates, not all sectors of the Quebec labour market fall prey to labour shortages.

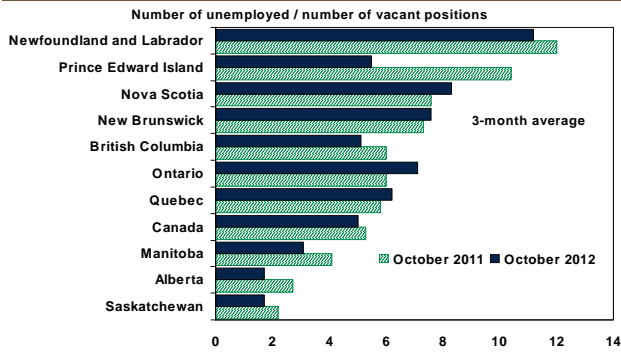
STATISTICS CANADA'S TAKE

For its part, Statistics Canada developed a way to assess the labour market based on job vacancy rates. Using the unemployment-to-job vacancies ratio (a very recent tool), the job vacancy rate of each province can be compared to the national average. A position is considered "vacant" if it meets all three of the following conditions: a specific position exists, work could start within 30 days, and the employer is actively seeking employees from outside the organization to fill the position. Data on job vacancies is collected through the Business Payrolls Survey (BPS), which is part of the Survey of Employment, Payrolls and Hours (SEPH). Only waged employment is considered. The BPS is particularly valuable because participation is mandatory. According to Statistics Canada, "The statistics compiled by SEPH are based on a census of administrative records for all in-scope establishments with employees that can be found on the Business Register."

Over the past few years, there has been a general sense that the number of job vacancies has steadily increased. The Statistics Canada results paint a different picture. The average number of job vacancies in Quebec for the three-month period ending in October 2012 was 50,600. However, for the same period in 2011, the figure was 53,200. The numbers show a downward trend in Ontario as well.

The survey also reveals the ratio of unemployment to job vacancies. In Canada, this ratio was 5.0 for the quarterly average ending in October 2012, whereas it was 5.3 for the same period in 2011. In Quebec, this ratio rose from 5.8 in 2011 to 6.2 in 2012, the result of an increase in unemployment and a decrease in vacant positions. Ontario experienced a similar trend (graph 1 on page 3). In short, the situation is far from alarming.

Graph 1 – The unemployment/job vacancies ratio increased in Quebec this fall

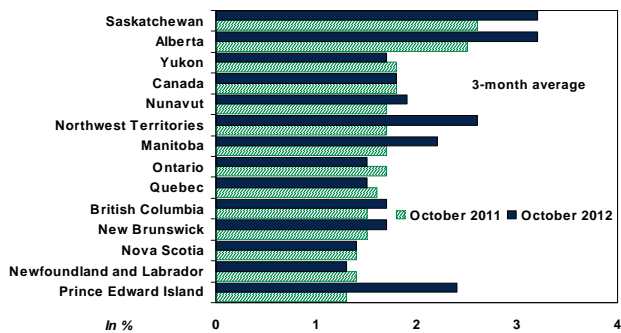


Sources: Statistics Canada and Desjardins, Economic Studies

A comparison with other provinces reveals that Quebec's numbers are above the Canadian average and that the increase in ratio is not a Quebec-specific phenomenon.

Lastly, Statistics Canada has created an index called the "job vacancy rate". It is calculated by dividing the number of vacant positions by the number of vacant positions plus payroll employment. The average job vacancy rate for the three-month period ending in October 2012 was 1.8% in Canada and 1.5% in Quebec. A year earlier, the rate was 1.6% in Quebec. These numbers reveal a situation that is far from critical and they compare favourably to statistics in western Canada (graph 2).

Graph 2 – The job vacancy rate in Canada decreased somewhat in October

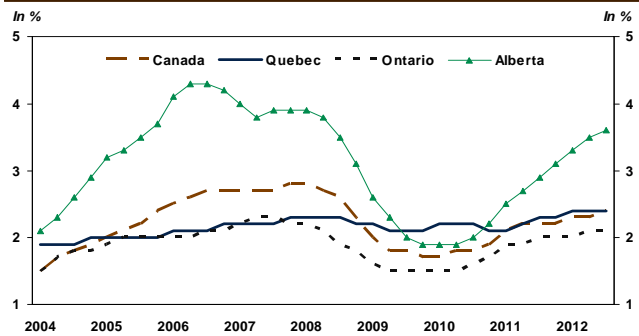


Sources: Statistics Canada and Desjardins, Economic Studies

OTHER TOOLS FOR ASSESSING THE MARKET

The Canadian Federation of Independent Business (CFIB) has created its own tools, which include a calculation of the job vacancy rate. In surveying its members, the CFIB has observed that the vacancy rate (graph 3) has shifted in relation to the economic climate. The rate decreased quite substantially throughout 2009 and 2010, most notably in Alberta and in Canada overall. However, in Quebec, the rate remained relatively stable. Even after the recession, from 2010 to 2012 it hovered between 2.2% and 2.4%. The Quebec rate is lower than the Canadian average. The CFIB rate is higher than Statistics Canada's. However, at 2.4 %, it speaks to a labour market that, on the whole, remains relatively unaffected by labour shortages.

Graph 3 – Vacancy rates based on the assessment of SME employers: little change in Quebec



Source: Canadian Federation of Independent Business, Business Barometer®, January 2013

Each month, the Federation polls its members on their biggest challenges and limitations. In a recent issue (January) of Business Barometer, the overwhelming response was weak customer demand, described in the results as "insufficient domestic demand." The second-biggest challenge was the "shortage of skilled labour" (graph 4). "Shortage of un/semi-skilled labour" came sixth. However, when they speak of

Graph 4 – According to SME employers in Quebec, the labour shortage is a major constraint

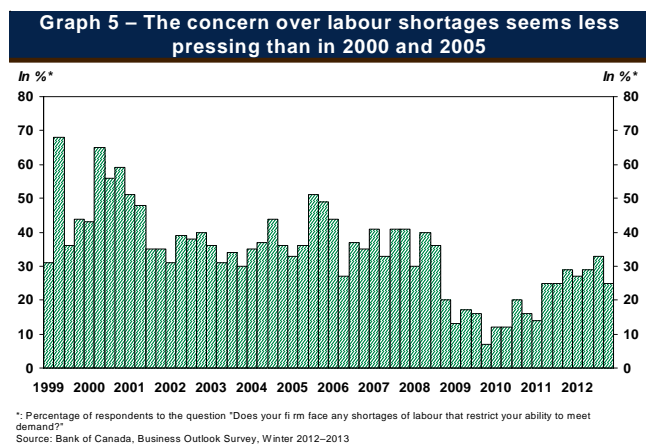


Source: Canadian Federation of Independent Business, Business Barometer®, January 2013

“shortage,” are entrepreneurs really referring to long-term vacant positions that result in serious operational problems? Or are they simply reporting recruitment difficulties?

However they define it, the percentage of respondents identifying a “shortage” in skilled or un/semi-skilled labour has fluctuated greatly since February 2009, although the numbers seem to be particularly rising in Ontario and Alberta.

The Bank of Canada conducts its own quarterly analysis through its Business Outlook Survey. Here again we find “labour shortage” used to describe employee recruitment difficulties. According to the BoC, the situation does not appear to have worsened in Canada since 2001 (graph 5). It should be noted at the end of 2012, the rate of respondents concerned about a labour shortage had decreased to 25%.



When data-issuing organizations refer to a “shortage,” unsurprisingly, this term is picked up by news media reporting on their results. However, when the unemployment-to-job vacancies ratio is above 5% in Quebec (as measured by Statistics Canada) and the unemployment rate surpasses 7.0%, it can be safely assumed that no widespread shortage exists.

OTHER PLAYERS JOIN THE GAME

Much ink has been spilled over the labour shortage issue, and not only by statistical agencies and labour market observers. In July 2012, the Certified General Accountants Association of Canada (CGA-Canada) tabled a study on the labour shortage in the skilled trades. This analysis was not

exhaustive, studying only five skilled trades in five provinces. Nevertheless, a few conclusions emerge. As observed elsewhere, the report concedes that labour shortages are difficult to directly assess and measure. However, it recognizes that “where sufficient data exists, an assessment shows that labour shortages occurred rather sporadically and did not persist for more than one year at a time over the past ten years.” The authors even mention that the results of employers’ surveys are subjective and tend to overestimate the tightness of the labour market.

The study points out the importance of closing gaps in statistical information in order to provide a more accurate picture.

NO FORMAL LIST OF OCCUPATIONS WITH LABOUR SHORTAGES

We are a long way from establishing a formal, exhaustive list of occupations facing recruitment difficulties, ranked by level of urgency. For different reasons, including changes in information-gathering and regional differences, it is very difficult to draw a complete portrait. However, information is available on the Web on Canada’s and Quebec’s occupation and trades needs. Human Resources and Skills Development Canada uses the Canadian Occupational Projection System, or COPS. This site offers forecasts of future labour demand and supply for 140 occupations over a 10-year span. The most recent projection covers 2011 to 2020.

Service Canada maintains the Job Futures Quebec website. It presents five-year forecasts of job growth and retirements for each of the 520 occupations of the National Occupational Classification (NOC). The most recent update runs from 2011 to 2015. It includes descriptions of the type of work involved in each occupation, as well as an overview of the major industries that are hiring, organized by occupation.

At the same time, Emploi Québec has its own online presence. “LMI Online” provides employment prospects organized by occupation. More than 500 trades and occupations are included and employment prospects are forecast over five years. Predictions are offered for the province as a whole as well as for each administrative region. Employer requirements are also provided. Users can explore employment opportunities through a link to a job placement site.

There is an abundance of online resources, and these three sites all provide different information. Interestingly enough, none of them mention the word “shortage.” In assessing employment prospects, they most often use vocabulary such as “acceptable”, “favourable” and “good.” When addressing labour demands, words like “moderate” and “high” are used, without specifying what they actually mean. In addition, it is difficult to make any cross-references between the information presented.

IN THE FIELD

Another way to examine demand for workers in the Quebec labour market is to look at studies performed by the comités sectoriels de main-d’œuvre (CSMO), or labour sector committees, which number 30 in Quebec. Their core mandate is to define the specific needs of each sector, propose measures to stabilize employment and reduce unemployment, and develop ongoing training programs.

These committees are made of representatives from all areas: employers’ associations, businesses, labour unions and workers’ associations. Each of these committees takes its own approach to examining the labour market.

Unfortunately, there is not one overall view of the labour market when it comes to labour “shortages.” By examining the available information and assessing each committee’s analysis, we are left with what could be described as a patchwork of varying data. In browsing the CSMO analyses, it is apparent that the information they contain is not always up to date. Certain studies have been carried out within the past two years but some date as far back as 2007 or 2008, while the results of others will not be available until 2013.

In addition, the methods used to analyze the labour market vary widely. Some studies focus on estimating labour demands in trade or occupation by determining the gap between the number of graduates and retirees. Others base their conclusions on recruitment challenges as perceived by employers in various sectors of activity. Still others look at the average age by occupation or by position occupied in order to predict possible labour shortages. Finally, some studies use sophisticated calculations to establish future needs.

It appears that very few CSMOs use the term “shortage” in their studies to describe the current market or when discussing future needs. For the aerospace industry, a sector that receives wide media coverage, the issue appears to be a lack of experience and qualifications among the workforce rather than a shortage of labour. Collaborations with educational institutions have already helped meet industry needs by boosting the number of new aerospace graduates.

In the chemical, petrochemical, refining and gas sectors, words like “lack” and “scarcity” of skilled labour are often used. According to a study conducted in the summer of 2012, businesses surveyed are planning to hire 160 chemical process operators within the next two years, while enrollment in chemical process training programs sits only at around 25 people per year.

The retail sector, which accounts for approximately 12% of employment in Quebec, also complains about the “scarcity” of labour. By 2016, recruitment difficulties will be considerable. Observers mention that “due to a lack of good job candidates, employers hire people who, above all, have a good attitude toward customer service.” Table 1 provides an overview of the positions that are most difficult to fill.

**Table 1 – Retail trade
in Quebec: positions most difficult
to fill in 2012**

Main type of occupation	Total of the 3 choices* (%)
Sales consultant	34
First-level supervisor (assistant manager)	17
Material handler	14
Store manager	11
Cashier	7
Pharmacist	7
Mechanic	6
Technician	8
Delivery person with specific driver’s license	4
Installer	3
Butcher	2
Decorator	2
Technical assistant	2
Exhibition and display	2
Service representative	1
Baker	1
Pump attendant (gas station attendant)	1
Office clerk	1
None	11

*Each employer could name up to three positions. Source: detailquebec.com

As for the mining sector, which has been experiencing major growth in recent years, the most recent publication of labour requirement estimates does not mention the word “shortage”. Several of the projects on which these projections are based have yet to see the light of day. Their viability relies on trends in global metal prices, a situation that calls for a cautious approach. Be that as it may, based on information available at the time of publishing (2012), the number of vacancies in this sector will be approximately 18,600 by 2021. A distribution of the occupations that will be most in demand by the end of the decade appears in table 2. All in all, these five occupations represent 30% of labour demand. In this context, it is not surprising that the industry is doing its best to publicize its employment opportunities and attracting a good deal of attention in the process.

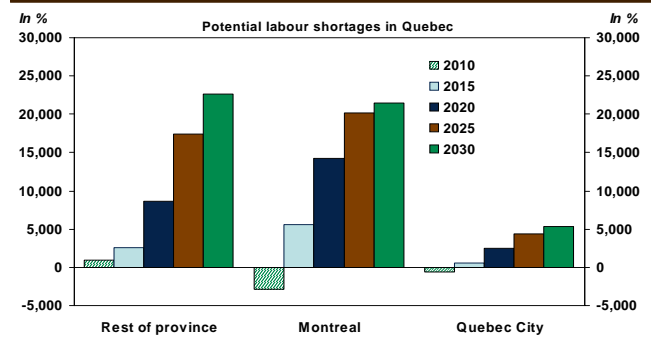
Table 2 – The five most in-demand professions in the mining sector by 2021

	% of labour needs
Specialized heavy-duty equipment operator (trucks and shovels)	11
Ore treatment machinery operator	5
Day labourer (mines)	5
Heavy-duty equipment mechanic	5
Industrial mechanic	4

Source: Comité sectoriel de main-d’œuvre de l’industrie des mines, 2012

Only certain sectors are speaking openly of shortages. The CSMO that deals with environment occupations reports that the metallurgy sector is experiencing acute difficulties in three or four major areas. In information technology, shortages are being felt in mid-level positions for workers with 4 to 10 years of experience. In tourism, labour shortages have worsened over the past few years but are likely to become a major problem in the next 15 to 20 years (graph 6). Signs will become more obvious in 2015. For the passenger transport sector, shortages are appearing in school transportation, according to the CSMO’s assessment.

Graph 6 – Tourism sector: a shortage is anticipated, especially as of 2015



Source: Canadian Tourism Human Resource Council, 2012

Even though few sectors use the term “shortage” when describing their labour situation, some trades and occupations are nevertheless in high demand. This is the case for agriculture, which in recent years has been recruiting workers abroad. The highly-publicized health sector also has jobs in high demand, and the Minister has already identified 12 occupations vulnerable to shortages in the public health network, highlighting 8 that are particularly at risk over a five-year period based on the list established in 2011. These include nurses, nursing assistants, beneficiary care attendants, physiotherapists, care centre pharmacists, psychologists, social workers and medical laboratory technologists.

Certain jobs in the financial industry are also showing a shortage. The insurance sector is finding recruitment a challenge and students are being approached by employers as soon as they graduate.

In short, even in sectors where labour shortage is admittedly a problem, the timing and severity of shortages vary. It is therefore not surprising that the message is somewhat confusing. Each sector of activity is trying to draw attention to itself in order to recruit workers or influence students as they choose their careers. There is general agreement that the situation is more a question of recruitment difficulties than a labour shortage. After 2020, a good number of baby boomers will have retired and the problem will likely become more acute.

If solutions are not found by 2020, the possible labour shortage will have a significant impact. In fact, business expansion could be threatened by a lack of workers. The relocation of production abroad could increase, a situation that would slow Quebec economy's growth and make it more difficult to fund government expenditures. In addition to provoking a sluggish economy, the aging population could also have a negative impact on public finances.

SEARCHING FOR SOLUTIONS

The labour market is "tight" in a number of activity sectors. However, solutions are forthcoming. Many have already been implemented to reduce the pressure on employers. Several industry and professional associations make an effort to inform educational institutions of occupations that are in demand, and attention is being drawn to lesser-known careers or occupations that have slipped under the radar in order to boost recruitment. For example, many businesses and professional associations have established relationships with training institutions (secondary schools, CEGEPs, technical institutes and universities).

Other sectors choose to recruit immigrants on a temporary basis. This is not exclusive to agriculture—the metal products industry has also followed this practice.

Ongoing workplace training is another popular tool among many companies and sectoral labour committees. Employer needs can be met by personnel who are already employed in a given company. In addition, working conditions are sometimes changed in an effort to retain experienced workers for a longer period of time. Some believe that the problem can be partially solved by selecting immigrants according to labour market needs.

Other solutions offer assistance to unemployed individuals to speed up their return to work. Over the past few years, the places where people can look for job opportunities have expanded to include local employment centres, online resources, privately-owned placement agencies, job fairs and more. In short, a wide variety of tools now exists to help employers find the perfect employee.

Many companies are starting to do things differently to break the cycle of "hire – layoff – hire again" that can be a by-product of economic slowdowns. Some businesses increase their training during periods of low activity, or they divide work among employees by slightly reducing work hours. To beat the competition at recruitment and to counter labour shortages, employers are making efforts to retain their workers by providing flexible work hours to improve the work-life balance or to keep their older workers longer. Employees may be offered performance incentives or bonuses as a reward for meeting targets and to boost engagement.

One tactic that is particularly popular among economists involves increasing productivity. This approach is often mistakenly associated with the mechanization of tasks. However, it often involves such measures as reducing paperwork, revising production methods and increasing the use of electronic communication, to name a few. Improving productivity may possibly lead to reduced labour demands.

DID YOU SAY SHORTAGE?

It is true that some employers face real difficulties when it comes to hiring, but is it correct to label these problems a labour shortage? Approximately 335,000 people were actively seeking employment last year in Quebec. That is a little more than six people per vacancy according to Statistics Canada's estimates. The Quebec unemployment rate, which averaged 7.8% in 2012, is not extremely low. It has seen better days, and in 2008 the rate was 7.2%. In the current context, it is somewhat premature to speak of a shortage in the Quebec labour market based on economic criteria. However, it is important to keep an eye out for the various signs of shortage as outlined by CETECH, such as strong employment growth, very low unemployment, the presence of long-term job vacancies, significant wage growth and a lack of or inadequate job successors. Labour supply is already an issue in some sectors, and the labour market should be closely monitored on the basis of the above criteria.

The situation will no doubt worsen as we progress through this decade due to our aging workforce. The post-2010 labour market will look very different from that of the previous decade, and will evolve even further after 2020. Some creativity and planning will be needed to avoid a widespread labour shortage in the years to come.

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