

A full plate for the fabricated metal products industry

The fabricated metal product manufacturing industry is present in all spheres of economic activity ranging from the manufacturing of bolts and beams to custom parts, microelectronics and giant turbines. In Quebec, the industry's 40,000 jobs account for some 10% of all manufacturing employees. It may be big, but the fabricated metal products industry is not immune to the pressures of foreign competition. And while it has the advantage of being present in many sectors, this also means exposure to their ups and downs. Still, an improving global economy and growing opportunities in growth sectors mean a bright future is in store. However, in order to capitalize on the favourable outlook, its companies are going to have to work hard to boost their productivity and make sure they have enough versatile workers.

THE INS AND OUTS OF THE INDUSTRY

Fabricated metal product manufacturing can be found across Quebec. You would be hard pressed to find a municipality without a machine shop. However, this is only one aspect of this sector that encompasses a broad range of activities. For instance, more than one third (between 35% and 40%) of its workers are employed in architectural and structural metal products manufacturing, while 20% to 22% produce turned products, bolts, nuts and screws. About 6% are involved in forging and stamping and the remainder work in the manufacturing of cutlery and hand tools, boilers, tanks, spring and wire products and hardware as well as in engraving and heat treating, to name just a few. At the end of 2010, the industry had some 2,000 companies in Quebec, 70% of which had fewer than 20 employees. Machine shops accounted for 34.2% while manufacturers of architectural and structural metal products made up about 30%.

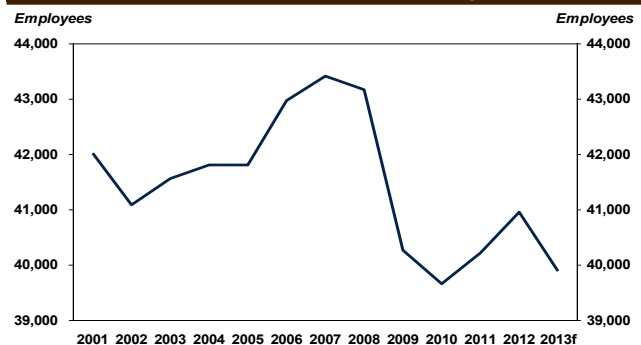
Although companies were present throughout Quebec, 44% were concentrated in the Montreal (23.1%) and Montérégie (21.2%) areas. A fair number were also found in the Chaudière-Appalaches (8.4%), Capitale-Nationale (6.8%) and Lanaudière (6.8%) regions.

Like the manufacturing sector as a whole, the fabricated metal products industry was hit hard by the last recession. However, is it still struggling, and more specifically, how is this industry faring today?

POST-RECESSION REPORT

According to Statistics Canada's Survey of Employment, Payrolls and Hours (SEPH), Quebec had roughly 40,000 employees in this industry last year. This may be an impressive figure, but it is down from the high of 43,000 in 2007 and 2008 (graph 1). The Great Recession took a toll not only on jobs in this industry but on the value of sales, the capacity utilization rate and gross domestic product (GDP) as well.

Graph 1 – Fewer employees in fabricated metal products manufacturing



f: forecasts
Sources: Statistics Canada and Desjardins, Economic Studies

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NOTE TO READERS: The letters k, M and B are used in texts and tables to refer to thousands, millions and billions respectively.

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Table 1 – Quebec manufacturing sector expenses, by NAICS category and subsector – 2004–2011 average

NAICS Subsector	Cost of Materials and Supplies %	Cost of Energy, Water and Vehicle Fuel %	Total Wages and Salaries %	Other Expenses %	Total Expenses %
Manufacturing	59.0	3.3	14.9	22.8	100.0
Metal products	52.0	2.0	23.7	22.3	100.0

Sources: Statistics, *Annual Survey of Manufacturers and Logging, 2004-2011*, and Institut de la statistique du Québec

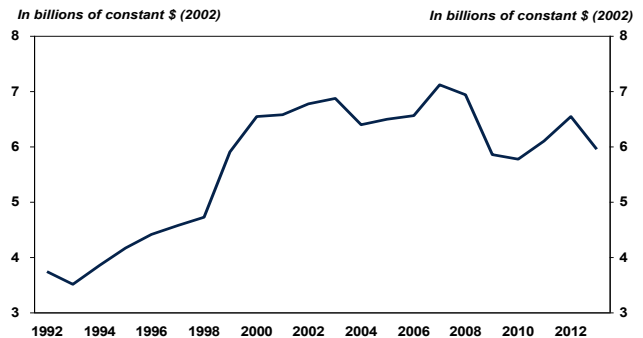
Fabricated metal product manufacturing is a labour-intensive industry. As table 1 shows, labour accounts for a large portion of operating expenses. According to Statistics Canada, between 2004 and 2011, wages and salaries represented 23.7% of operating expenses in the fabricated metal products industry compared to an average of 14.9% in the manufacturing sector overall. The industry’s percentage is comparable to percentages recorded for machinery manufacturing (24.8%) and computer and electronic product manufacturing (22.9%). Labour is therefore clearly vital to the success of the fabricated metal products industry. However, it is facing major challenges in this regard, as we will see later.

In the past few years, the industry’s GDP has essentially followed the same trend as employment: down in 2008 and 2009, followed by growth until 2012 and a contraction in 2013 (graph 2). Interestingly, the industry’s relative importance in the manufacturing sector has not decreased, quite the contrary. It was estimated at 5.9% in 2010 and 6.5% on average over the past three years. Since 2010, it has accounted for close to 1% of the province’s GDP.

Although manufacturing sales have recovered since the recession, they lost their momentum in 2013 (graph 3). The

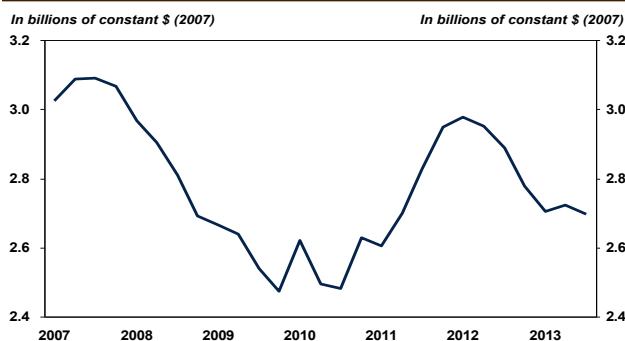
capacity utilization rate hovered around 80% last year, close to the average observed in the 2000s, but it has been unable to match its Q2 2007 high of 87.8% (graph 4). The fact is that economic growth in North America has been modest in recent years, certainly nowhere near the frenetic pace that characterized the years between 2002 and 2007. In truth, it would be unrealistic to expect the sector to quickly return to the levels recorded before the global economy plunged into a recession.

Graph 3 – Quebec: Manufacturing sales still below pre-recession levels



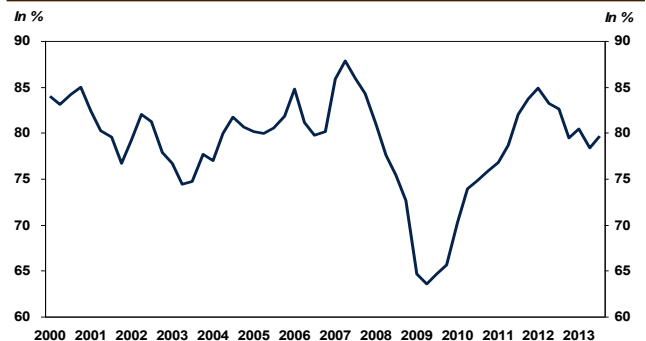
Sources: Statistics Canada and Desjardins, Economic Studies

Graph 2 – GDP rebound short-lived



Sources: Institut de la statistique du Québec and Desjardins, Economic Studies

Graph 4 – Industrial capacity utilization rate near 80%



Sources: Statistics Canada and Desjardins, Economic Studies

At first glance, the industry seems to be recovering but a closer look shows that it still has a way to go since the number of employees is still below 2007 levels, GDP has levelled off, capacity utilization remains around 80% and manufacturers' sales have yet to match their pre-recession level. Other than the recession, what other factors could have held this industry back and are these factors still present?

THE CHALLENGES

One of the daily challenges confronting the fabricated metal products industry is foreign competition, which is being delivered both on the Quebec and foreign markets served by local businesses. A look at metal product trade statistics for the last decade provides insight into the dynamics of this industry. Graph 5 shows that after peaking in 2008, Quebec exports declined thereafter and were up only slightly in 2012. At the same time, with the exception of 2009 and 2010, the value of imports has grown steadily, outpacing exports abroad since 2008 and creating a growing gap. Based on initial figures for 2013, exports will increase faster than imports, a situation that will reduce the trade deficit a somewhat.

China is Quebec's biggest competitor. Imports from this country rose from 11.6% in 2002 to 26.6% in 2012. In a labour-intensive industry, China's much lower wages make its production more attractive than ever, to our detriment. Mexico and several South American countries are also vying for the North American market. All to say that competition is fierce and will not be easing any time soon.

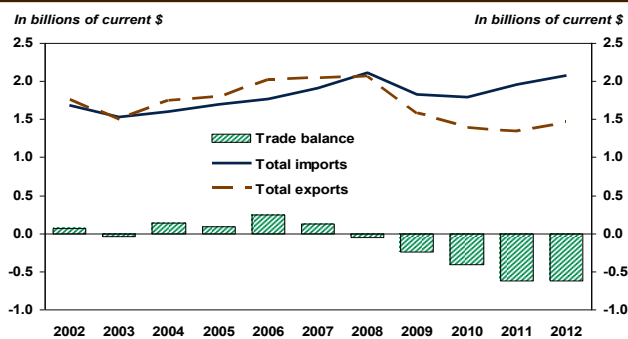
A study, conducted by the Canadian government, of the country's manufacturers for the period between 2007 and 2009 showed that 18% of metal product manufacturers that were confronted with new competition responded by innovating, while the vast majority (80%) dropped their prices. In this context, the Canadian dollar's rise since late 2002 has placed an additional burden.

Recruitment is another challenge. Because it operates on a custom production and job order basis and production cycles are dictated by demand, the metal products industry does not appeal to all workers. This problem is compounded by the fact that vocational and technical training is not popular with young Quebecers, making it especially difficult to find new hires.

According to the Comité sectoriel de la main-d'œuvre dans la fabrication métallique industrielle, recruitment is difficult for many reasons and is holding the industry back. Although there is no shortage of professional and vocational programs, few people register and those who do are drawn to other industries, such as aeronautics, further shrinking the candidate pool. Employee turnover and the average age of workers in key positions exacerbate the problem. Not to mention that some of the workers in this industry have a low level of education, making the introduction of new technology especially difficult. This becomes worrisome when we know that innovation is an important differentiating factor that can help maintain, if not boost productivity.

Lastly, adopting new technologies, whether in the form of work tools, procedures or equipment, requires a major effort. It also means having employees capable of working with numerically-controlled machine tools and computer-aided design (CAD) and computer-aided manufacturing (CAM) software. The introduction of robotics and micro-computing to welding operations, for example, requires new skills. However, it also leads to greater accuracy and, ultimately, productivity gains.

Graph 5 – Value of Quebec imports outpaced exports



Sources: Statistics Canada and Desjardins, Economic Studies

Our companies already have much to do to remain competitive; however, the industry’s future doesn’t hinge solely on their own initiatives. There are many other factors beyond their control: the loonie’s fluctuation, changes in regional or global demand for their products, technology developments and the opening of new markets, to name just a few. These are just some of the things fabricated metal product manufacturers will have to be on high alert for in the years ahead.

INDUSTRY OUTLOOK

The labour market seems to be in good shape. According to Emploi-Québec’s forecasts for the manufacturing sector, the fabricated metal products industry will create jobs, as will transportation equipment and machinery manufacturing. The average annual employment growth rate in the fabricated metal products industry is projected at 1.1% between 2012 and 2016 versus 0.2% for the manufacturing sector and 1.0% for employment overall. Therefore, based on the data available for 2012, the future is bright.

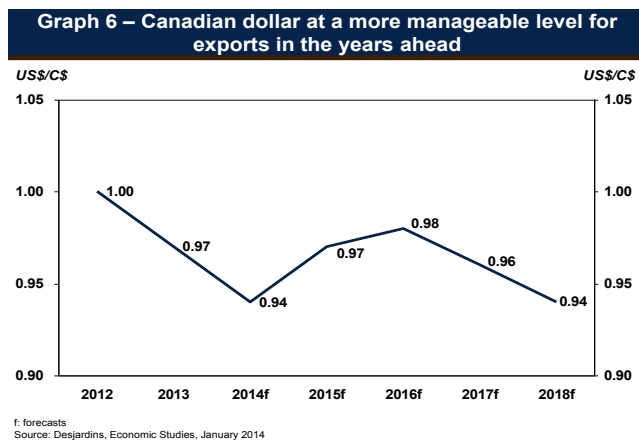
Where the Canadian dollar is concerned, the situation is more favourable for exporters. Based on current forecasts, the industry will have some breathing room since the loonie is expected to remain below parity for much of this decade (graph 6). The loonie’s rise between 2003 and 2011 caused problems on two fronts. First, it made Quebec exports more expensive and therefore less attractive, especially in mass production, where low-wage emerging countries are delivering fierce competition. Second, the dollar’s strength gave Canadian and Quebec metal product buyers greater purchasing power abroad.

Right now, the fundamentals do not support a rapid increase in the dollar. For the next few years at least, the Canadian economy is expected to grow at a slower pace than its U.S. counterpart. As well, although energy and metal prices are slated to go up somewhat in the next few years, the increase will not be as much as in the 2000s, meaning the loonie will lose some of its sheen for investors. As well, expectations have changed regarding the Bank of Canada’s (BoC’s) stance. The central bank was expected to announce a rate hike before the Federal Reserve but this is no longer likely to happen. All these factors undermine the prospects of a sharp increase in our currency in the near term.

Although a weaker dollar may provide respite for exporters, it doesn’t necessarily help the industry as a whole since it needs to import materials in order to work and a weak dollar makes this more expensive to do.

The respite for exporters does not mean that competition will be less intense. The relative weakness of the dollar does not mean companies can put off productivity-boosting investments, which are needed in all areas, including new machinery and technology, innovative and more efficient production techniques, and cutting-edge IT tools. Improving production technology goes hand in hand with reorganizing production methods, a formidable challenge in an industry made up predominantly of SMEs that must juggle prospecting for business, churning out goods, ensuring quality, staying on top of industry developments and finding and training workers.

Another factor that affects the industry is demand for metal products, especially in the infrastructure market and in particular for architectural and structural metal products. In Quebec, the infrastructure program implemented in 2007 has already peaked. That said, many roads need repair and there are projects in progress or in the pipeline (e.g. teaching hospitals, bridge rehabilitation). Residential and office building construction will slow, in the latter case mainly in Montreal and Quebec City where the markets need time to recover from the higher vacancy rates recorded in 2013. Still, the planned road extensions in the Montreal area augur well for the emergence of new warehouses to optimize the distribution chain. In all likelihood, there will be business opportunities to be had in the Quebec market.



The fabricated metal products industry serves many markets, one of which is mining. Can this sector fuel growth in metal products? Activity could pick up in Quebec's mining sector as the price of metals such as nickel and copper firm up during the decade. However, this projected increase is nowhere near the price explosion observed in the 2000s. As for the price of iron, forecasts are mixed. The unclear outlook for this sector means that it can't be relied on to drive growth in fabricated metal products manufacturing in the coming years.

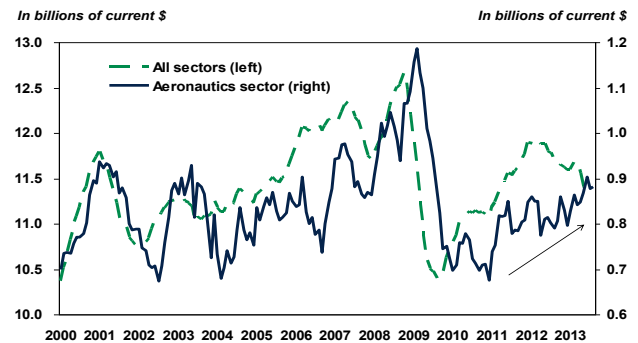
LOOKING ELSEWHERE AND THINKING DIFFERENTLY

There are definitely opportunities in western Canada, where oil production is still booming and demand is robust for structural metal. Energy prices are projected to rise modestly throughout the decade, thereby sustaining production, and investment forecasts are encouraging. In Alberta, the value of building permits rose 18.6% in the first 11 months of 2013 over the same year-earlier period. The commercial and institutional sectors are especially strong, which bodes well for the year ahead.

The recovery in the U.S. could also be a boon for the industry in Quebec, first, because demand from U.S. manufacturers could grow for Quebec-made components and finished goods, and second, because the non-residential real estate market is regaining some of its lost ground. Vacancy rates are down in shopping centres and office buildings, which is encouraging for new construction. Lastly, there is growing criticism of the dilapidated state of U.S. road, sewer, airport and energy infrastructures, which urgently require investments. That said, the industry will have to contend with the Buy America Act. A few Quebec companies have already set up shop on U.S. soil, a situation that could ease some of the restrictions imposed by this legislation.

Metal products manufacturers also serve the transportation sector, in particular the aeronautics market. After a couple of tough years, sales picked up for Quebec's aeronautics manufacturers in 2013 (graph 7) and, as a result of the global recovery, should continue trending upwards. This outlook is therefore good news for the fabricated metal products industry, which evolves in its wake.

Graph 7 – Quebec: Manufacturing sales – aeronautics sector on the road to recovery



Sources: Statistics Canada and Desjardins, Economic Studies

These are just a few sectors where, in the coming years, the fabricated metal products industry, will find countless opportunities, ranging from rail to defence, recreational vehicles, wood, energy (oil, gas, wind, solar), machinery manufacturing and more. Its markets are increasingly diverse and unconventional; think optomechanics and biomedicine for example. The lines between industries are becoming increasingly blurred.

TAKING NOTHING FOR GRANTED

The future is filled with countless, varied opportunities for growth, fuelled by a global outlook that will continue to improve as the decade progresses. The dollar will remain below parity for a long while, favouring exports. The challenge is to turn these opportunities into sales. In this regard, nothing can be taken for granted. Quebec's companies have much work to do on the labour and productivity fronts if they are to deliver the goods. The fabricated metal products industry has a full plate.

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