Perspective

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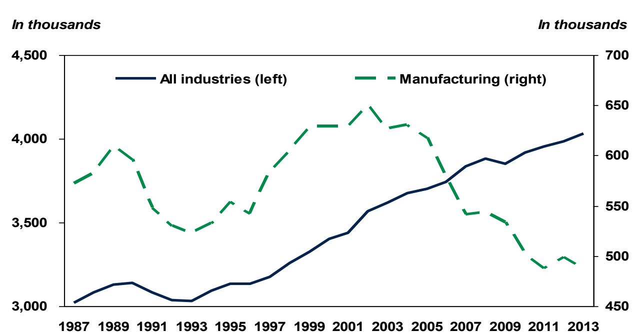
Quebec's manufacturing sector after the disillusionments of the 2000 decade

The 2000 decade was full of upheavals for Quebec's manufacturing sector; however, the post-recession period has yet to bring about any major changes. The hemorrhage in employment seems to have come to an end, but GDP is treading water. In the past three years, though, we have observed slight improvement in exports and in a general opening towards international trade. In short, the meltdown in this sector has, for the most part, cooled. Meanwhile, some major manufacturing countries, including the United States, have built new foundations for making a comeback after the shock of the financial crisis. The question to be asked is as follows: Did Quebec firms take advantage of this post-crisis period to win new markets and increase their competitiveness, or did they run for cover between two bitter struggles with the competition? The years ahead will enable us to judge.

THE HEMORRHAGE IN EMPLOYMENT HAS MODERATED

Employment is an indicator that always attracts great interest. A long-term view (graph 1) shows us that manufacturing jobs hit their peak in Quebec in 2002 (with an annual average of around 650,000) and subsequently shrank, reaching 486,600 in 2013. Since 2010, they have oscillated around 490,000. Graph 1 reveals two things: one, that this trend did not mirror that of total employment, which expanded in Quebec during this period; and two, while the media keeps talking about a hemorrhage in employment, we note relative stability in the past three years. The brunt of the shock was felt between 2003 and 2010 which, with a slight time lag, coincides with the appreciation of the Canadian dollar.

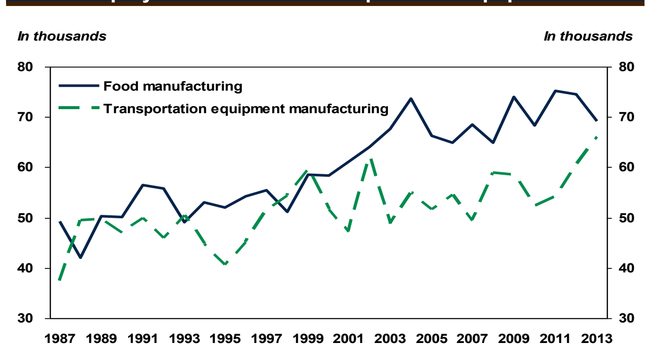
Graph 1 – Quebec: total employment is up while manufacturing employment is down



Sources: Statistics Canada, Labour Force Survey and Desjardins, Economic Studies

In 1987, the first year for which data are available from the Labour Force Survey (LFS) conducted by Statistics Canada, the number of manufacturing jobs was 571,700. While the vast majority of sectors suffered job losses between 1987 and 2013, we note that some of them actually saw growth during that period. This is the case for food and transportation equipment manufacturing (graph 2). The plastics and rubber products sector also saw an increase, but on a smaller scale. It should be noted that 1987 is the year before the implementation of the Canada–United States Free Trade Agreement (CUSFTA). However, not all sectors experienced an increase in workers; it is important not to generalize.

Graph 2 – Quebec – Two notable exceptions in manufacturing employment: food and transportation equipment



Sources: Statistics Canada, Labour Force Survey 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.

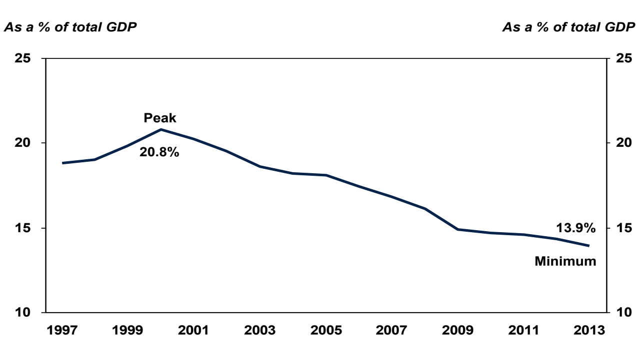
Expectations about employment numbers are often very high. Are they realistic? Some analysis can shed light on certain contradictions. On the one hand, economic decision-makers generally hope to see an increase in the number of manufacturing jobs. Not only are these jobs traditionally better paying than those in other sectors, but they have a multiplier effect on other spheres of activity (business services, marketing, etc.). On the other hand, there are calls for greater work productivity, so that local businesses will be more competitive against commercial adversaries and able to stay in the race. How can we increase the number of jobs when competition is extremely fierce and, at the same time, a portion of manufacturing production has been outsourced abroad?

In this situation of a slower pace of production, it is difficult, if not impossible, to reconcile an increase in the number of workers with greater productivity. In order to do so, we would need to have a sizable increase in production to eventually see an increase in employment. This assertion is all the more true in that the use of automation and robotization is increasingly favoured. We must also put this issue into perspective alongside that of the aging population and the scarcity of labour which does not support a sharp increase in new jobs, but rather the replacement of retiring workers.

MANUFACTURING GDP HAS BEEN STAGNATING SINCE 2010

We have heard it on every podium: the weight of the manufacturing sector in the Quebec economy is diminishing. However, the sharp decline observed during the 2000s has tapered off (graph 3). Since the recession, Quebec's total GDP has stagnated between 14% and 13%. The idea that the sector is still in free fall no longer holds up. Like the global and U.S. economies, which have been very hesitant in recent years, Quebec's manufacturing industry, taken as a whole, has been sputtering, rather than collapsing.

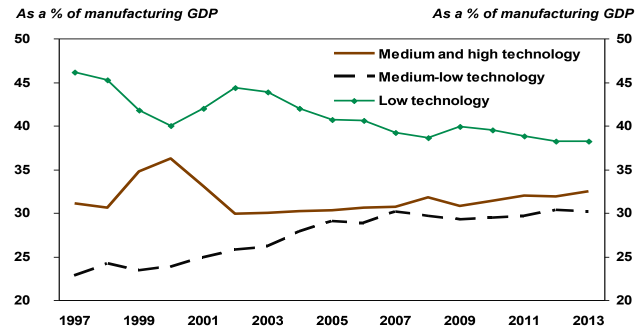
Graph 3 – Quebec – Manufacturing GDP: the decline is moderating



Sources: Statistics Canada, table 379-0030 and Desjardins, Economic Studies

An analysis of GDP, according to the technological level of goods produced, tells us that the most striking changes seem to have been observed before the recession. Graph 4 shows that between 1997 and 2007, the share of low-technology-level production shrank. Medium- and high-technology production (appendix 1 on page 5) dropped sharply due to the bursting of the tech bubble at the beginning of the 2000s, stabilized until 2009 and has been growing modestly since 2010. Finally, the share of medium-weak technology expanded up until 2007, and then stabilized at around 30% of manufacturing GDP. In short, the wait-and-see policy that has characterized the entire global economy has also reached Quebec factories.

Graph 4 – Quebec – GDP according to technological level: little change since the recession



Sources: Statistics Canada and Desjardins, Economic Studies

The recession threw the pace of goods production into a tailspin all around the world. Right now, it seems that each economy is trying to reposition its pawns on the global chessboard. One spies upon one's business adversaries, while calculating one's chances of holding onto one's existing customers and trying to penetrate new markets. Clearly, the subdued restart of the European economy, the slower pace in the emerging markets and the weak U.S. manufacturing sector from 2008 to 2013 have, so far, made it impossible to kick-start manufacturing operations in Quebec.

THE MAJOR MANUFACTURING PLAYERS HAVE BEEN TRADING THE TOP POSITIONS BACK AND FORTH OVER TIME

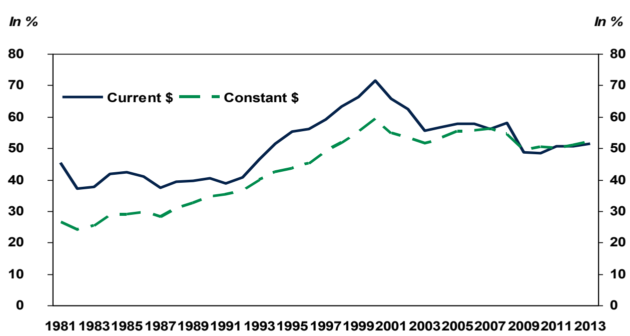
As far as the value of sales is concerned, we note that since 1992, the top five sectors have not changed in the slightest (appendix 2 on page 5). The food manufacturing sector is still in top place in 2013, accounting for 13.9% of the value of total sales. Primary metal manufacturing holds second or third place. Meanwhile, transportation equipment has gained stature both in rank and in relative size, climbing from 6.9% in 1992 to 11.6% in 2013. It comes as no surprise that pulp and paper production has declined over time, while the manufacturing of computer and electronic products has been no more than a shooting star, ranking among the top five sectors around the 2000s.

Structural changes occur over long periods of time. The greatest upheavals may be seen within the sectors. During the periods from 1992 to 2000 and from 2000 to 2009, the ranking changed. During the interval from 2009 to 2013 (shorter than the others), few changes were observed; it would be premature to talk about a post-recession restructuring of manufacturing. The shakeouts took place before that. However, we do note a stronger concentration of the five main sectors in total manufacturing sales since the 2000s, compared with the 1990s.

THE RATE OF OPENNESS HAS FALTERED SINCE 2001

The rate of openness to international merchandise trade is calculated as follows: it is the sum of Quebec's exports to and imports from outside Canada, expressed as a percentage of Quebec GDP. As shown in graph 5 (current and constant dollars) whose readings go back as far as 1981, the trend accelerated after the implementation of CUSFTA. The peak was reached in 2000, followed by an abrupt drop until 2003, a consequence of the bursting of the tech bubble which did damage to the computer and electronics industry, and of the U.S. recession of 2001. Between 2003 and 2008, the rate oscillated up and down, falling below the 50% threshold during the last recession. Since then, we note a slight upturn. At the same time, we have seen Quebec manufacturers expand their trade with the other Canadian provinces in reaction to international competition and the sharp appreciation of the Canadian dollar.

Graph 5 – Quebec: the rate of openness* has declined, but it is gradually starting to head up



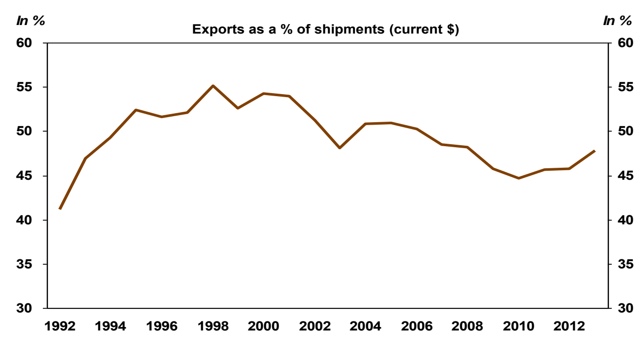
* : (Exports of goods + Imports of goods) / total GDP
Sources: Institut de la statistique du Québec and Desjardins, Economic Studies

The current rate of openness, for merchandise, is approximately 50%. This may seem disappointing if we consider all the efforts that have been invested in prospecting new markets over more than a decade, both by governments and by regional and local authorities. Still, it is higher than it was in the 1980s; yet, many free trade agreements have been signed since then. The globalization of production, and promotional efforts to integrate global production chains, have not necessarily been reflected in Quebec factories, at least, not to the extent that one might wish. It should be mentioned that the strength of the Canadian dollar from 2003 onwards was a headwind for exports, but a benefit for imports.

INTERNATIONAL EXPORTS IN CONVALESCENCE

On the exports side of the equation, it is interesting to note that there have been positive developments recently, contrary to a number of indicators that have been observed until now. If we look at the share of Quebec manufacturing sales that have been exported outside Canada since 1992, we note that it culminated in 1998 at 55.1% (graph 6). That was before the ascent of the Canadian dollar, the tech crisis, the U.S. recession of 2001, the end of import quotas for textiles and clothing, and the trade war over lumber… in short, a period when factors more favourable to international trade prevailed.

Graph 6 – Quebec: we note an increase in goods exports as a % of shipments



Sources: Statistics Canada and Desjardins, Economic Studies

Since then, conditions have tightened up again and the recession of 2009 helped to further limit international exports of goods manufactured in Quebec. The number of exporting firms has shrunk. That phenomenon is not exclusive to Quebec: Ontario has also seen its exports decrease. However, since then an upturn in shipments heading outside of Canada has been observed in Quebec, and the share of sales that are exported has risen, from 44.6% in 2010 to 47.7% in 2013. This upturn is supported in particular by stronger demand from the United States.

On one hand, the value of exports heading south of the border began growing again in 2011. At this point, it has yet to get back to where it stood before the last recession ($52.1 billion in 2007 and $51.0 billion in 2008). On the other hand, the percentage of international merchandise exports going to the United States (which was over 80% at the beginning of the 2000s) fell to a low of 67.5% in 2011, and then climbed back to 70.7% in 2013. In short, the health of Quebec's main trading partner outside Canada played a role in this turnaround in statistics.

RESTRUCTURING, DOWNTIME, SALUTARY BREAK OR THE BEGINNING OF A NEW ERA

A review of the major economic indicators relating to Quebec's manufacturing sector reveals that few major changes have been observed since the last recession. Restructuring, in terms of a significant change in the sector, took place to a greater degree at the end of the 1990s and beginning of the 2000s than after the recession which, along with the slowness with which the global and U.S. economies got back on their feet after it, prolonged the state of uncertainty for Quebec firms. They found themselves facing a dilemma: whether to invest to increase their productivity or strengthen their competitiveness, without knowing when and if the markets would be ready to welcome them.

However, the downtime that followed the recession appears to have been a salutary break for some large countries and could benefit Quebec's manufacturing sector in some respects. The United States has expressed its intention to strengthen its role as a major, global producer and manufacturer. Competition is fierce, especially in the south[1]. Judging by the determined efforts it is making to increase the number of factories within its borders (e.g. Electrolux Canada transferring its plant from L'Assomption, Quebec to Memphis), it wishes to rebuild its production chains on this continent and repatriate some of the production that has been outsourced to Asia. It is not a done deal, but it does present business opportunities for Quebec entrepreneurs.

Apart from these intentions on the part of the United States, the relative weakness of the loonie against the U.S. currency could also work in the favour of Quebec goods producers. However, basing a strategy on a weak currency cannot win out in the medium and long terms; this was proven by the collapse in 2003 and the years that followed. Other strengths need to be relied upon. Moreover, Quebec manufacturers can hope for more than to operate in the shadow of the United States[2]. Without denying the potential that still lies in that direction, we need to ask ourselves what role our local manufacturing firms want to play.

The proliferation of bilateral trade agreements and the recent signing of the Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union provide opportunities that could help Quebec's manufacturing sector pick up steam and promote growth in certain sectors, in particular medium and high technology, that already trade extensively with Europe. The Trans-Pacific Partnership free trade negotiations could also present business opportunities. In addition, the developing countries offer good growth potential, and we should also cast our eyes in that direction.

The years to come will tell us whether the current period has been a turning point for the strengthening of Quebec's manufacturing sector, or an interlude between two difficult periods of face-offs with the competition (from 2000 to 2008 and from 2014 to the end of this decade) which, in the end, will further weaken Quebec's position. In any event, in a context of automation labour shortages, success will not be measured solely in terms of employment.

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[1] "The competition among states-especially the southern states - is legendary". The Globe and Mail, July 5, 2014. *An American revival: A Canadian manufacturer's quest to rebuild itself.*

[2] *The repatriation of manufacturing: beyond the rhetoric*, Perspective, volume 24, February 2014, 5 pages. http://www.desjardins.com/ressources/pdf/per0214e.pdf

Appendix 1 – GDP: Distribution of sectors by level of technology

Low-level technology	*Medium-low level technology*	*Medium and high-level technology*
Food manufacturing	Petroleum and coal product manufacturing	Chemical manufacturing
Beverage and tobacco product manufacturing	Plastics and rubber product manufacturing	Machinery manufacturing
Textile and textile product mills	Non-metallic mineral product manufacturing	Computer and electronic product manufacturing
Clothing, leather and allied product manufacturing	Primary metal manufacturing	Electrical equipment, appliance and component manufacturing
Wood product manufacturing	Fabricated metal product manufacturing	Transportation equipment manufacturing
Printing and related support activities		
Paper manufacturing		
Furniture and related product manufacturing		
Miscellaneous manufacturing		

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

Appendix 2 - Manufacturing sales
The five dominant sectors as percentages of the Quebec total

Rank	*1992*	*2000*	*2009 (recession)*	*2013*
1	Food 14.0%	Transportation equipt. 12.2%	Food 15.4%	Food 13.9%
2	Paper 9.6%	Comp. and elect. products 11.1%	Primary metal mfg. 11.9%	Primary metal mfg. 13.8%
3	Primary metal mfg. 8.8%	Primary metal mfg. 10.3%	Transportation equipt. 11.3%	Transportation equipt. 11.6%
4	Chemicals 7.6%	Food 9.7%	Petroleum and coal 10.9%	Chemicals 6.2%
5	Transportation equipt. 6.9%	Paper 8.8%	Paper 6.9%	Paper 6.0%
Share of the total held by the top 5	**46.9%**	**51.8%**	**56.4%**	**51.5%**

Sources: Statistics Canada and Desjardins Economic Studies