Increase in cyclical productivity in Québec
Business competitiveness still fails to improve

It is well known that, in the international arena, Québec has for many years been lagging way behind in terms of productivity growth. In the past ten years, Québec has recorded one of the lowest productivity increases of all the OECD countries. The province therefore has a lot of catching up to do in order to reach the front ranks. However, Québec benefited from the increase in cyclical productivity that characterized the latest recession. In fact, the province temporarily outpaced Canada, which saw a deterioration last year. Even though the gain achieved in 2009 gives it a positive start on the new economic expansion cycle, Québec needs to redouble its efforts to accelerate its productivity. In the last few years, the province’s business competitiveness from a global perspective has been severely tested by the appreciation of the loonie. This magnifies the urgency of changing direction so that Québec can improve its competitive position in foreign markets.

THE IMPACT OF THE RECESSION ON PRODUCTIVITY

Over the past ten years or so, Canada’s international status on the productivity front has deteriorated considerably. The latest recession only made things worse, since the country’s productivity evolved in the opposite direction from previous cycles.

Usually, productivity increases during a recession. Massive layoffs generate a greater reduction in hours worked than in output, which improves businesses’ efficiency. This is what happened during all recessions in Canada since 1981, with the exception of that of 2008-2009. Employers did not cut their labour force sufficiently to match the downturn in their activity. In many cases, businesses were reluctant to let their employees go, due to the difficulty of finding qualified workers in periods of expansion. For the first time in thirty years, the recession was characterized by a decline in the country’s productivity.

Given the slim increase observed since the end of 1990s, and the acceleration that has occurred south of the border, this is very bad news for Canada. Productivity kept following an upward trend during the recession in the U.S., and its rate of growth even intensified to nearly 4% in 2009. American businesses were forced to make more job cuts due to the credit crisis, which was far more severe there than in Canada, causing a rapid deterioration of their financial positions. The urgent need to save considerable amounts of cash had a devastating impact on the labour market. “Also, labour laws in the US may make for a lower cost in letting workers go than do the laws in jurisdictions in Canada.” Staff cutbacks were far greater than production cuts, which had the effect of stimulating productivity in the United States. Although the damage to the job market was very harmful to the American economy, the gains in efficiency achieved by the production apparatus constitute an asset in a context of fierce international competition.

Even though Canada’s cyclical productivity headed in the reverse direction from that of the U.S. last year, some provinces, including Québec, did perform well (graph 1). A notable improvement occurred in 2009, since the hours worked (-3.7%) declined more than business real GDP (-2.3%). A 1.4% gain in productivity enabled Québec to outpace Canada and Ontario, and to get a head start as the new expansion cycle got underway. Since Québec had been barely managing to follow the Canadian trend in the past ten years or so, the improvement in productivity achieved in 2009 puts the province in a more comfortable position (graph 2). However, the game has not been won yet. This enviable position appears to be fragile and could quickly be reversed, since the downturn in productivity recorded in Canada is likely to be temporary. Moreover, last year’s upswing in cyclical productivity is not sufficient in itself to boost Québec close to the average of the member countries of the Organisation for Economic Co-operation and Development (OECD), let alone its main foreign trading partner, the United States.

Graph 1 – Productivity has declined in Canada, but has risen in some provinces and in the United States

<table>
<thead>
<tr>
<th>In %</th>
<th>Variation in Productivity in 2009</th>
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<tbody>
<tr>
<td>0%</td>
<td>0.0</td>
</tr>
<tr>
<td>-1%</td>
<td>0.0</td>
</tr>
<tr>
<td>-2%</td>
<td>0.9</td>
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<td>-3%</td>
<td>0.9</td>
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<tr>
<td>-4%</td>
<td>1.4</td>
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<tr>
<td>-5%</td>
<td>1.6</td>
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<tr>
<td>-6%</td>
<td>3.8</td>
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<td>-7%</td>
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<td>-9%</td>
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<td>-10%</td>
<td>-10.0</td>
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Sources: Statistics Canada and Desjardins, Economic Studies

HAS BUSINESS COMPETITIVENESS IMPROVED?
The concept of productivity is a useful way of evaluating an economy’s capacity to produce goods or services per hour of work. Consequently, this is a measure of efficiency that must be supplemented with other indicators if we are to assess the competitiveness of an economy, particularly as far as labour costs are concerned. Since the labour component represents about 60% of businesses’ production costs, wage levels have a direct impact on competitiveness. If a country produces a lot in one hour of work, but its wages are relatively higher than elsewhere, its competitive position is not necessarily favourable. Labour compensation, as well as the exchange rate, have a direct effect on an economy’s international competitiveness.

Graph 2 – The gain in productivity has enabled Québec to outpace its neighbours in 2009

Productivity also comes into play, and it is the interaction between all these indicators (see box on page 4) that determines the fluctuation of the unit labour cost (ULC), which represents the compensation paid to all workers in relation to real GDP. In other words, it expresses the total cost of wages per production unit. Within a given economy, the unit labour cost is tied to the evolution of both productivity and wages. Consequently, an increase in labour compensation does not necessarily result in a higher unit labour cost, if it is offset by equivalent gains in productivity.

In Québec, hourly wages have been climbing steadily for the past ten years. The increase in wages, approximately 40%, has been greater than the increase in productivity (+12%). This has pushed the unit labour cost up by more than 20% (graph 3 on page 3). However, that is less than what was seen in Canada and in Ontario (graph 4 on page 3). Consequently, Québec’s business competitiveness did not deteriorate as much as that of the country as a whole. Québec’s unit labour cost is still relatively low, enabling it to remain competitive on the national market.

Given its limited domestic market, Québec is very dependent on exports abroad to sell off its output; hence the importance of offering products at competitive prices. Québec’s exports abroad currently account for approximately 30% of GDP. In a situation of increasing globalization, production costs—and labour costs in particular—must confront the competition. A rapid rise in the unit labour cost does not necessarily hinder an economy’s international competitiveness, at least in the short term. This is because, when comparing ULC trends in different countries, we must also take fluctuations in the exchange rate into account.

The OECD has 30 member countries: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Norway, Netherlands, New Zealand, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States

Compensation includes wages and salaries, non-salary benefits and the payroll taxes paid by the employer (such as contributions to employment insurance and the Canada and Québec pension plans).
Approximately 75% of Québec’s exports abroad are bound for the United States. Therefore, the loonie’s fluctuations play a key role in the competitiveness of companies that ship their goods south of the border. From 1999 to 2002, the Canadian dollar held steady at around US$0.65. This made it possible for the unit labour costs of Canada, Québec and Ontario to keep pace with that of the United States. The exchange rate subsequently began its ascent (graph 5), which clearly put businesses on this side of the border at a disadvantage. Canada’s ULC expressed in U.S. dollars shot up abruptly (graph 6). The gap between it and the American ULC widened considerably, reducing exporters’ competitiveness. It must be pointed out that, for quite a while, the weakness of the exchange rate had given Canadian businesses an artificially comfortable competitive edge in the American market. Now that the dollar is heading towards parity in a sustainable way, the illusion is being replaced with a harsh reality. The urgency of improving productivity sufficiently to offset the effect of wage increases, and thus reduce the unit labour cost, is a major issue for Québec.

**WEAK COMPETITIVENESS IN THE INTERNATIONAL ARENA**

Does the picture look gloomier if we compare Québec with the United States? Although the U.S. is our main foreign trading partner, that trade has become more geographically diverse in recent years, to the point where 25% of our international shipments are now headed to overseas destinations, particularly Europe. Now, while Québec has recorded one of the lowest rates of productivity growth in the past ten years, the increase in the unit labour cost seems relatively contained. Thus Québec is doing fairly well with respect to its unit labour cost compared to the OECD member countries (graph 7 on page 5). However, the gap with the United States is substantial, which works against exports to that country. It must be pointed out that these comparisons do not take into account emerging countries such as China, where wages are absurdly low and that have taken the markets of the main industrialized countries by storm. However, worker protests are beginning to make themselves felt. Strikes by employees of some internationally
Box 1
Definitions and relationships between concepts

Productivity is an indicator of economic performance. It reflects an economy’s production capacity per hour worked.

The unit labour cost (ULC) is used to gauge how competitive an economy is. Within a given country, two factors affect the unit labour cost: labour productivity, which, when it rises, pushes the ULC down; and labour compensation, which fluctuates in the same direction as the ULC.\(^4\)

The ULC is calculated using the following formula:\(^5\)

\[
\text{ULC} = \frac{\text{total labour compensation}}{\text{real gross domestic product (GDP)}}
\]

Since

\[
\text{labour productivity} = \frac{\text{real GDP}}{\text{person – hours worked}}
\]

therefore, real GDP = labour productivity \(\times\) person – hours worked.

The ULC can also be written as follows:

\[
\text{ULC} = \frac{\left(\frac{\text{total labour compensation}}{\text{person – hours worked}}\right) \times \text{person – hours worked}}{\text{Labour productivity} \times \text{person – hours worked}}
\]

And lastly:

\[
\text{ULC} = \frac{\text{total labour compensation}}{\text{labour productivity}}
\]

“The ULC and labour compensation per person-hour worked are therefore inversely proportional to productivity. Unless a country has a net advantage over competing countries in the production of a good or service, or can specialize in products or services for which price is less important in the decision to purchase, the ULC will always have a considerable impact on international trade. That is, it affects the sale price of goods and services produced. ULC growth does not necessarily damage a country’s competitiveness. If the country’s currency depreciates vis-à-vis its foreign competitors, the country may remain competitive internationally despite growth in domestic ULC. Its reflects both a country’s inflation rate (because of its numerator, labour compensation per person-hour) and any improvement in competitiveness through technological change (because of its denominator, labour productivity)”\(^6\)

In this Economic Viewpoint, all the calculations are made exclusively for businesses. The public sector is excluded from the analysis so that we can better pinpoint the competitive capacity of an economy on foreign markets.

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\(^4\) STATISTICS CANADA. “Aggregate labour productivity measures & unit labour costs”, The Daily, Catalogue 11-001E, pp. 6-9, November 109992.


\(^6\) Idem note 5.
renowned companies established in China have forced wages up. The gradual revaluation of the yuan should also gradually reduce the competitiveness of Chinese products in foreign markets. However, the difference in production costs is still so great compared to the industrialized countries that China will be a formidable adversary on the competition battleground for a long time to come.

PRODUCTIVITY: THE REMEDY OF CHOICE
Québec’s improved productivity during the recession is certainly encouraging compared to the decline observed in Canada and Ontario. But, since the United States and most of the industrialized countries have also recorded gains recently, Québec’s position in the global arena is no better than before. The province still has a ways to go; it certainly must not rest on its laurels after last year’s positive results. To narrow the productivity gaps, and even attempt to close them, accelerating productivity must become a general trend in Québec.

Many levers can be used to get to that point. Among the most important are innovation, education levels and training of the labour force, investments in machinery and equipment and the tax regime and regulations. A course was set for each of those factors last year in an Economic Viewpoint,7 and the paths to improvement that were identified then are still worth taking. We must pursue our efforts so that the cyclical improvement in productivity observed during the recession will become a structural trend in the years ahead.

The Québec Research and Innovation Strategy8, updated by the provincial government at the end of last June, should promote a surge in innovation. The 2010-2013 Plan calls for investments of $1.2 billion and aims to broaden the impact of research in businesses. A more widespread application of the products of research in industrial settings should help increase innovation in Québec. Clearly, the goal of making the economy more competitive internationally while boosting productivity is a priority for the provincial government. If the results meet the expectations, this will be a decisive turnaround for the economy. Let us hope that Québec will be able to catch up with its international competitors, and at least narrow the considerable gap that has grown between it and its next-door neighbour, the United States.

Productivity is not the only barometer of an economy’s performance. The unit labour cost and the exchange rate also play a key role in business competitiveness. In Québec, labour compensation has risen faster than productivity over the past ten years. The appreciation of the Canadian dollar has exacerbated the situation, so that a substantial gap in competitive capacity has formed between Québec and the United States and many OECD member countries. Since the loonie is heading towards long-term parity, only an acceleration in productivity or slower growth in wages can improve our competitiveness in international markets. Since the scarcity of labour (a factor that fell by the wayside during the recession) will soon rear its head again in many industries, it will be difficult to hold down wage increases. In the years to come, the demographic shock will make itself fully felt in Québec, reducing the labour pool. Additional pressure may well be brought to bear on wages. The ultimate solution to improve our international competitiveness is to increase our productivity, starting now. It bears noting that this also serves as a basis for the creation of an economy’s wealth.
