

## Job growth in the context of economic slowdown: Impacts on productivity

### Summary

The divergence in the variation of employment in various activity sectors has repercussions for Canada's productivity growth. Sustained job creation in the services sector reduces labour productivity gains in these sectors, despite relatively rapid growth in production. The deterioration by productivity in most services sectors has had little impact, however, on economic growth in the short term, as foreign competition is less present in this sector. This is not the case in the manufacturing sector, which has seen substantial deterioration in its international competitiveness. While job losses in manufacturing have led to a slight improvement in labour productivity, there is still a substantial shortfall in terms of capital, limiting multifactor productivity growth. In the long term, weak productivity growth in most sectors raises concerns about sustaining the evolution of Canadians' standard of living.

### EMPLOYMENT GROWTH SHOULD CONTINUE

In the April 15 *Economic Viewpoint*, we showed that the Canadian job market could still surprise us with relatively sustained growth over the coming quarters, despite the clear slowdown by economic growth. The divergence between domestic demand and foreign trade is being reflected in the job market's evolution. On one hand, lively domestic demand encourages rapid job growth in the services sectors. On the other, deterioration by Canadian foreign trade is bringing on a recession in manufacturing, accompanied by many job losses in the sector. The bottom line is that the losses in manufacturing should be fully offset by gains in other sectors, so total employment could maintain a fairly high growth rate.

### SMALLER PRODUCTIVITY GAINS

The job market's ongoing growth in a context of slower economic growth has repercussions for labour productivity, however. Note that the variation in labour productivity is usually measured by the evolution of output by all businesses minus the fluctuations in the total number of work hours needed to produce these goods and services. Total work hours are, of course, the combination of the average number of hours worked during a week and the

number of workers. In a context of sustained employment growth and a net slowdown in the advance by production, we must expect<sup>1</sup> the movement by labour productivity to be smaller.

This can already be seen in Statistics Canada's figures: Canadian labour productivity has stayed at almost the same level since the end of 2005 (Graph 1). As shown in Graph 2, this weakness is due to ongoing and fairly fast growth by hours worked, while business output slowed during that period.<sup>2</sup>

Stagnation by productivity has some important repercussions for Canada's economy. As wage growth is high—and faster than inflation—slow productivity growth leads to an increase in unit labour costs.<sup>3</sup> Although, at first glance, the evolution

<sup>1</sup> Assuming that the average number of hours worked a week remains almost the same.

<sup>2</sup> An increase in hours worked leads to a negative contribution to productivity.

<sup>3</sup> Unit labour costs correspond to the wages and other benefits paid to produce one unit of a good or service.

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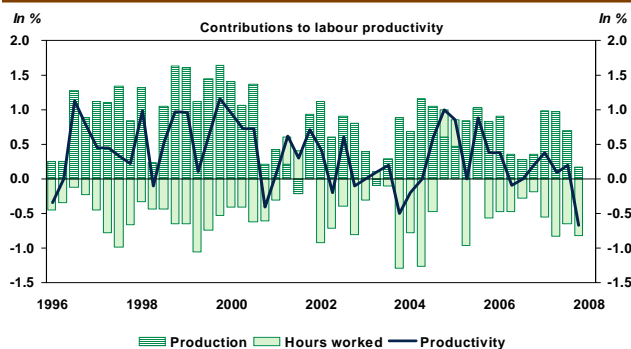
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**Graph 1 – Labour productivity has been at almost the same level since the end of 2005**



Sources: Statistics Canada and Desjardins, Economic Studies

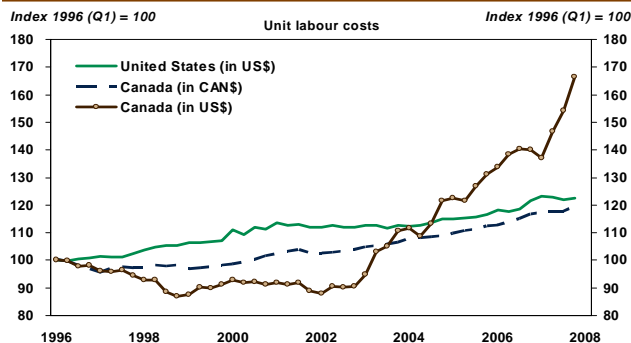
**Graph 2 – Growth by hours worked impedes productivity**



Sources: Statistics Canada and Desjardins, Economic Studies

by unit labour costs has been quite similar in Canada and the United States in the last few years, the picture is very different if we convert Canadian unit labour costs into U.S. dollars. This shows that the loonie's sharp appreciation since 2003 has generated much faster growth in Canada's costs (Graph 3). In other words, Canadian businesses have seen their competitiveness deteriorate substantially against their competition south of the border. The same observation

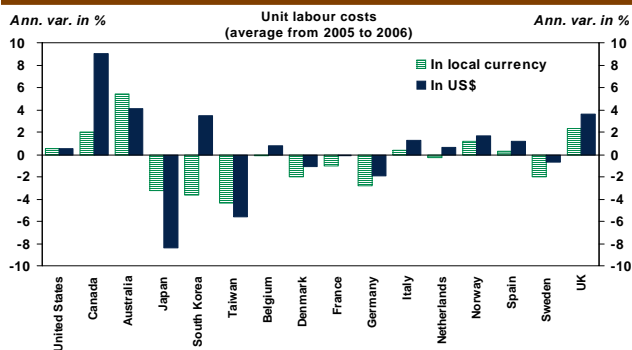
**Graph 3 – Canadian business competitiveness is deteriorating**



Sources: Statistics Canada, Bureau of Labor Statistics and Desjardins, Economic Studies

emerges from the international comparisons done by the U.S. Bureau of Labor Statistics, which show that Canada recorded the highest growth rate for unit labour costs (in US\$) between 2005 and 2006 (Graph 4). In this context, the size of the deterioration undergone by Canada's trade balance in the last few years cannot come as a surprise.

**Graph 4 – The loonie's appreciation has made Canada one of the worst countries in terms of competitiveness**



Sources: Bureau of Labor Statistics and Desjardins, Economic Studies

## AMATTER OF COLLECTIVE WEALTH

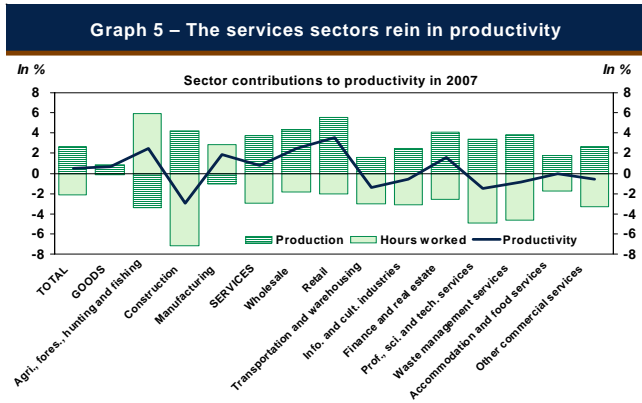
Aside from the considerations of cost control and competitiveness on international markets, productivity is also a major issue for Canada's medium- and long-term prosperity. The efficiency gains created by improving productivity increase wealth and raise Canadians' standard of living. What's more, one of the simplified estimates for the growth potential of an economy's output is the combination of the increase in productivity and increase in population. For instance, average annual growth by Canadian labour productivity has been 1.4% since 1990, while average annual population growth for this period has been 1.1%. Their combined advance, 2.5%, is just a few decimals different from average annual growth by real GDP since 1990, which is 2.7%.

This is a particularly important observation in the context of the current population aging. Statistics Canada's latest projections show that Canada's population could in fact start to shrink in a few years. As a result, not only will Canadian production's growth potential no longer be benefiting from the positive contribution from the population, but population could, on the contrary, rein growth in. In order to maintain relatively sustained growth by production potential, Canadians will have to offset the population factor by boosting productivity substantially. Otherwise, the increase in Canadians' standard of living could lose a lot of speed, or even deteriorate over the long term.

## A SECTOR BY SECTOR COMPARISON...

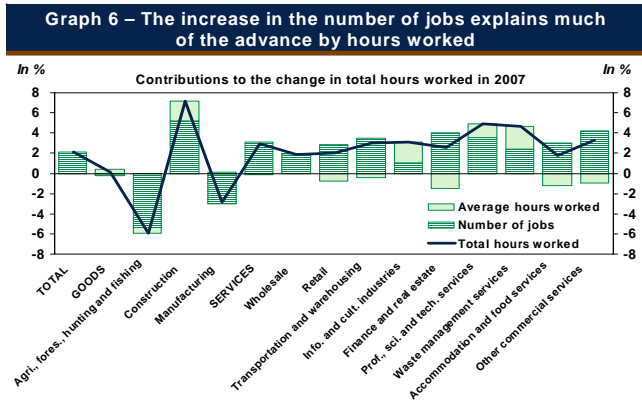
Of course, the Canadian economy's activity sectors are not all affected in the same way. In goods sectors, hours worked

have adjusted downward (positive contribution to productivity) in manufacturing and agriculture, forestry, hunting and fishing.<sup>4</sup> In 2007, this helped to offset the sectors' decline in production and generate a gain in labour productivity (Graph 5). The balance for all goods sectors in 2007, however, is darkened by a drop in productivity in construction, where the number of hours worked (negative contribution) has grown more quickly than production.



Sources: Statistics Canada and Desjardins, Economic Studies

For services, no less than two thirds of the sectors<sup>5</sup> are showing a decline by labour productivity for 2007. Among other things, the contribution from the number of hours worked is negative for all of the services sectors. This is mainly due to an increase in the number of workers, as the number of hours worked did not fluctuate much in most cases (Graph 6).



Sources: Statistics Canada and Desjardins, Economic Studies

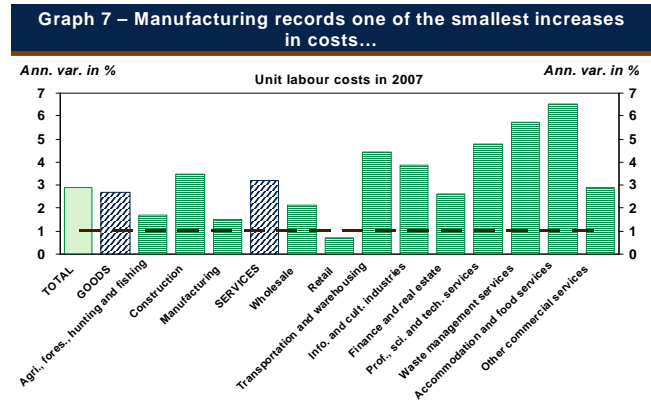
<sup>4</sup> The data available for the mining, oil and gas sectors and utilities are not available.

<sup>5</sup> The data for the arts, entertainment and recreation sector are not available.

This means that the sustained employment growth recorded in services is slowing productivity growth in these sectors. Since lively domestic demand should favour an ongoing rising trend in service sector employment, we must expect productivity to continue to deteriorate in these sectors over the coming quarters.

However, services only represented about 15% of Canada's total exports and imports in 2007. The lost competitiveness which is associated with the services sector's decline in productivity will thus not have much of a short-term impact on foreign trade and economic growth overall. The competitiveness issue is much more prevalent in the goods sectors, especially manufacturing, where output fell in 2007. The other goods sector that has recorded a drop in output, i.e., agriculture, forestry, hunting and fishing, is less of a problem, as it only represents 2% of Canada's total real GDP, compared with manufacturing's 15%.

Some adjustments are, however, observed in recent years. Furthermore, the gradual disappearance of the least competitive manufacturers has improved the manufacturing sector's average productivity lately (the number of jobs lost since the beginning of 2003 totals 354,400). As a result, manufacturing was one of the sectors with the slowest growth by unit labour costs in 2007 (Graph 7).



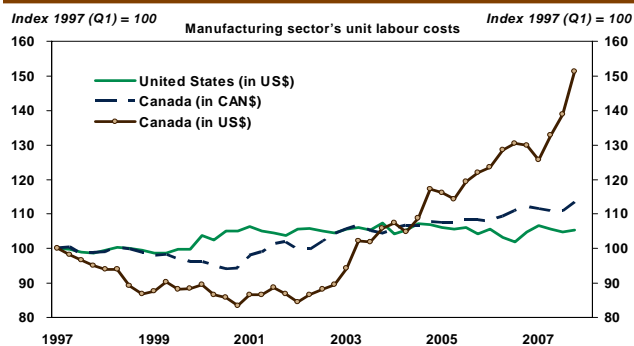
Sources: Statistics Canada and Desjardins, Economic Studies

Unfortunately, it seems that this action is still not enough. Canadian manufacturers' unit costs expressed in American dollars shot up in 2007 due to the loonie's appreciation, and do not stand up well in comparison with the costs of their competitors south of the border (Graph 8).

**TWO LEVERS FOR IMPROVING MANUFACTURER'S COMPETITIVITY**

As it is very unlikely that the Canadian dollar will depreciate to any great extent in the coming years, manufacturers will have no choice but to seize the reins to reduce the gap between

**Graph 8 – ... but the impact of the loonie's appreciation is more important**



Sources: Statistics Canada, Bureau of Labor Statistics and Desjardins, Economic Studies

Canadian and American unit costs. To do so, we must broaden our analytical framework to two levers which have an impact on multifactor productivity<sup>6</sup>, that is, labour and investment.

In terms of labour, our April 15 *Economic Viewpoint* noted that manufacturing could lose approximately 175,000 more jobs a year by 2010. The decline in employment must, however, be accompanied by an increase in investment to generate a substantial increase in multifactor productivity.

Yet the latest data on multifactor productivity show that there is still a long way to go in terms of investment. While labour productivity went up by about 2% on average from 2005 to 2006<sup>7</sup>, capital productivity fell by almost 2% over the same period. In the end, the manufacturing sector's multifactor productivity has not fluctuated much since 2005.

This means that manufacturing needs a major jump in investment to enable any significant improvement in multifactor productivity and competitiveness. The problem is that the manufacturing sector's uncertain outlook is not conducive to an increase in investment. Moreover, many businesses say they are grappling with tighter credit conditions, a situation which cuts into the financing opportunities for potential investment projects.

In this context, it would be surprising to see the trend turn around and a substantial acceleration by investment in manufacturing over the coming quarters. We must therefore expect productivity gains to be bogged down by a lack of

capital in this sector. (For further information on business investment, especially in Québec, please consult the April 21 *Economic Viewpoint*).

### MANUFACTURING WILL ONCE AGAIN HURT ECONOMIC GROWTH

The lack of any notable improvement in manufacturing's multifactor productivity will have repercussions for Canada's economy over the next few quarters and even years. Manufacturing's chronic issues and its crumbling competitiveness internationally are likely to once again harm foreign trade. As in the last few years, the trade balance's deterioration will therefore rein in real GDP growth in 2008, 2009, and perhaps even beyond that.

### CORRECTIVE ACTION IS NEEDED IN THE LONG RUN

While the problems with productivity seem inevitable in the short term, especially in manufacturing, we must still ask ourselves about the challenges they create in the longer term. For instance, the decline by productivity in many services sectors may not have a big impact on foreign trade and economic growth in the short term, but, over the longer term, it does create some concern about the evolution of Canadians' standard of living. Weak productivity growth in the services sector (which represents nearly 70% of the Canadian economy) could, if it lasts, hinder growth by production potential and rein in growth by Canadians' standard of living. As a result, the need to improve performance on productivity in the years to come involves more than the manufacturing sector—it also affects most of the other activity sectors. What's more, the need to improve productivity gains in the services sector could intensify in the next few years, as the services sector's relative weight in foreign trade is likely to increase.

To achieve this, businesses absolutely must accelerate investment. Of course, growth by business investment has been fast in the last few years, but much of this growth stems from the development of new production capacity in the natural resources sectors, which has had very little impact on productivity. We must also make up our minds to put more effort and resources into sectors with greater value added.

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<sup>6</sup> The variation in multifactor productivity is derived from the variation in production minus the variation in combined inputs. Combined inputs are the combination of labour and capital. This measure of productivity is therefore broader than the usual labour productivity, which only looks at the impact of labour on production.

<sup>7</sup> 2007 data will only be available in the summer of 2008.