



Industry Canada

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Improving Productivity

The Key to Higher Living Standards

High productivity is key to a high standard of living

Productivity is the most important determinant of a country's standard of living.

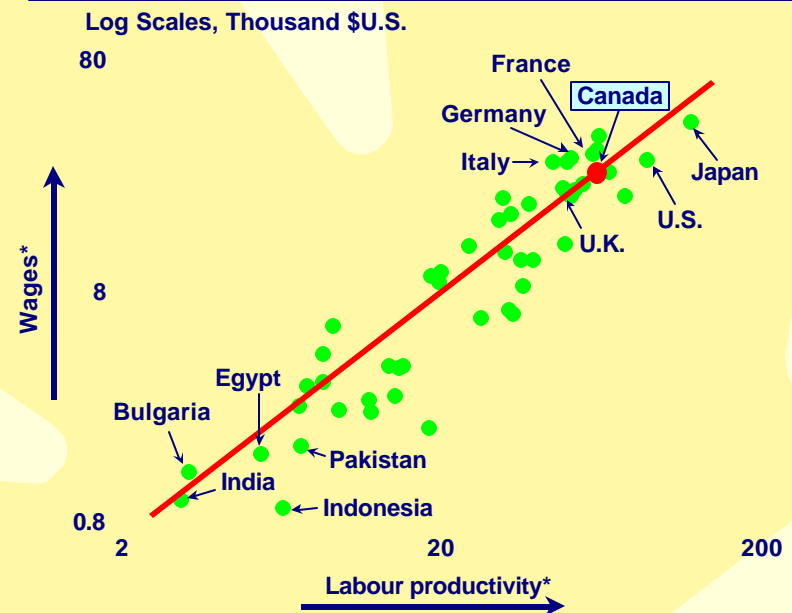
By international standards, Canada is doing relatively well, displaying both high productivity levels and a high standard of living.

- But, Canada can and should do better.

Productivity growth is the key to maintaining and improving living standards — it gives us the biggest "bang for the buck".

Conference Board
Performance & Potential, 1997

The Impacts of One's Productivity Performance Wages and Productivity, 1993



* In manufacturing
Source: International Yearbook of Industrial Statistics, 1998; Rodrik (1998)

Canada's standard of living is considerably below that of the U.S.

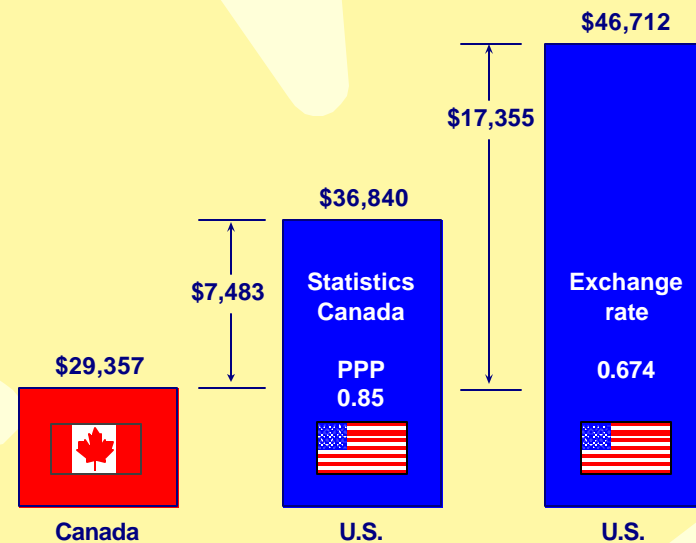
Compared to Canada, the average standard of living in the United States is significantly higher.

- In 1998, based on the range of estimates of purchasing power parity (83 to 85 cents), real per capita income was 25% to 30% higher in the U.S. than in Canada.
- This is reflected in Canadians' spending patterns. For example, the best-selling car purchased in Canada costs \$15,700, while in the U.S. it costs \$21,348.



Source: DesRosiers Automotive Yearbook, 1998.

1998 Standards of Living (Real Income per Capita)



Source: Statistics Canada, U.S. Bureau of Economic Analysis and Conference Board

Canada's lower standard of living largely reflects our lower levels of productivity

The per capita real income gap between Canada and the U.S. can be attributed to only two factors:

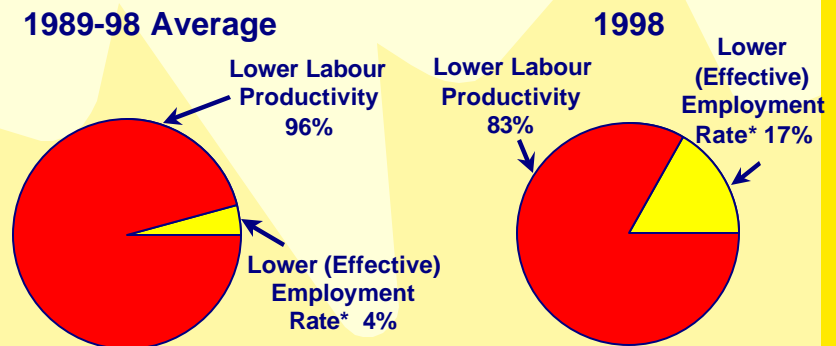
- a lower level of productivity; and
- a lower employment rate.

Lower labour productivity has explained on average about 96% of the Canada-U.S. standard of living gap throughout the decade.

- In 1998, lower labour productivity accounted for about 83% of the real per capita income gap — which is low by historical standards, and a lower employment rate accounted for 17% of the gap in real per capita incomes.

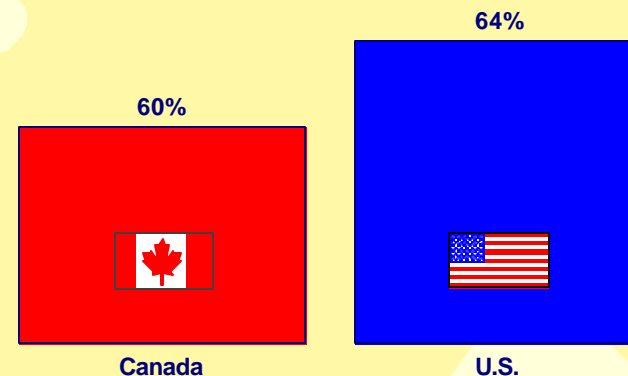
Creating jobs is important, but so is improving productivity: if the employment situation in Canada was as good as in the U.S., per-capita income would increase by \$1,300, but would still be more than \$6,000 below that of the U.S. because of our lower productivity.

Sources of the Income Gap



* Total hours worked per capita, based PPP=0.85
Source: Statistics Canada, U.S. Bureau of Economic Analysis, U.S. Bureau of Labour Statistics and OECD

Employment Rate, 1998



Source: Statistics Canada, U.S. Bureau of Labour Statistics

Clearly, Canada's levels of productivity are well below the U.S. ...

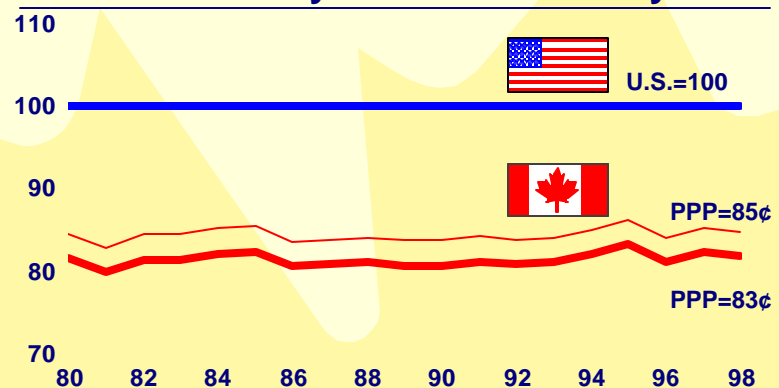
For the overall economy, the gap between productivity levels in Canada and the U.S. are large (15% to 20%) and have been relatively constant for 20 years.

And, in the manufacturing sector, the gap in productivity levels has increased, and was over 25% in 1997.

In comparison to other key world economies, our productivity has been slipping.

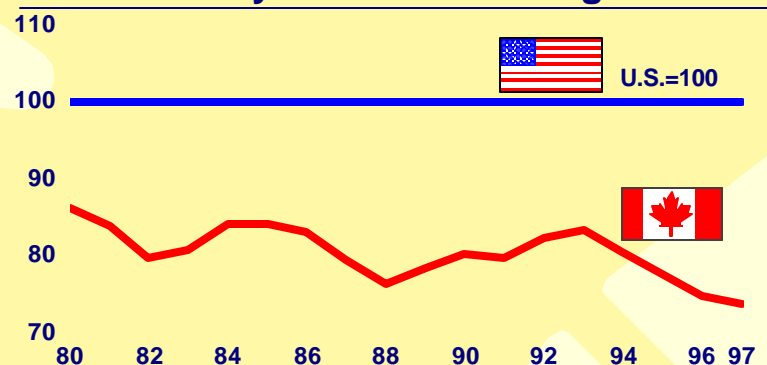
- Our level of productivity (for the overall economy) was ranked second only to the U.S. in 1976. Two decades later, it has slipped to fifth place among the G-7.

Productivity* — Total Economy



* Labour productivity measured using \$1998 GDP per hour.
Source: Statistics Canada, U.S. Bureau of Economic Analysis, U.S. Bureau of Labour Statistics and OECD. Canada-U.S. comparisons are made using range of estimates for purchasing power parity (PPP).

Productivity* — Manufacturing Sector



* Labour productivity for the manufacturing sector is measured by GDP per hour.
Source: Statistics Canada, U.S. Bureau of Labour Statistics; based on the methodology of the Centre for the Study of Living Standards

...and little progress has been made in closing these productivity gaps over 20 years

Over the last twenty years, for the total economy, labour productivity has grown at about the same rate in Canada as in the U.S. Hence the Canada-U.S. productivity gap for the total economy is large and unchanged.

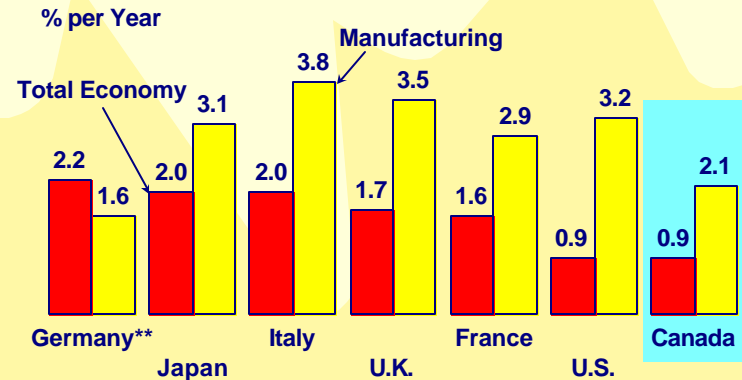
In Manufacturing, labour productivity growth in Canada was significantly slower than that in the U.S. Hence the Canada-U.S. manufacturing productivity gap is large and has widened.

In comparison to key world economies, our productivity report card is no better. In terms of productivity growth, we rank at or near the bottom among the G-7 economies.

- Our level of labour productivity was ranked second only to the U.S. in 1976. Two decades later, it has slipped into fifth place among the G-7.

Canada's productivity growth considerably outpaced that in the U.S. in 1997, but this result was abruptly reversed in 1998. This demonstrates the need to focus on underlying trends when analysing productivity, rather than results for one specific year.

**G-7 Labour Productivity Growth*
Total Economy and Manufacturing, 1979-97**

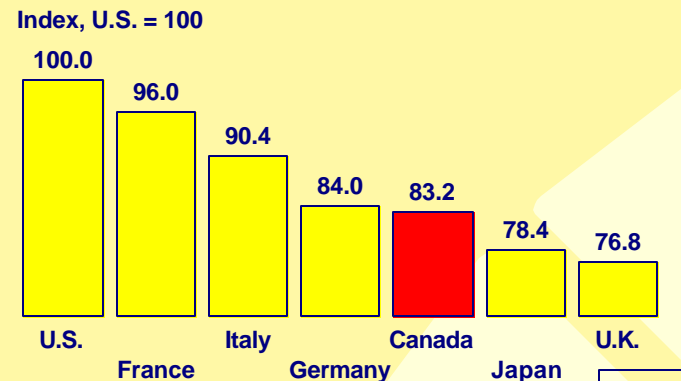


* Output per employed person

** West Germany, and total economy refers to business sector.

Source: OECD National Accounts for Total Economy and Bureau of Labour Statistics (March 16, 1999) for Manufacturing. 1979 was chosen as the base year for comparison as this period preceded the global 1980 recession. Moreover, this time period is commonly used by international organizations such as the OECD.

**Labour Productivity*
Total Economy, 1996**



* Output per worker

Source: OECD STI Outlook 1998

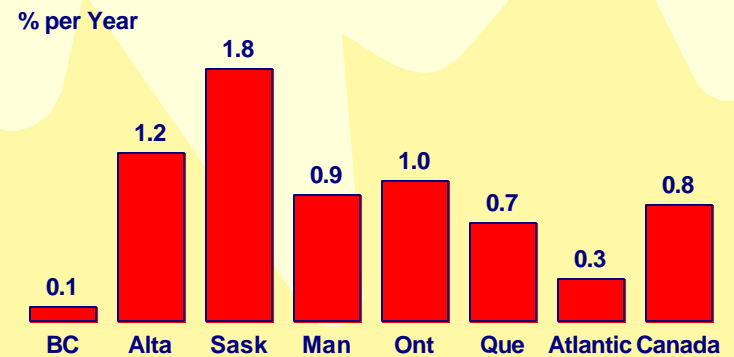
This weak productivity performance relative to the U.S. holds regionally

Productivity growth has shown considerable regional variation in Canada over the past 15 years.

Alberta and Ontario currently show the highest levels of productivity in Canada.

However, all provinces have productivity levels well below that of the average U.S. productivity level.

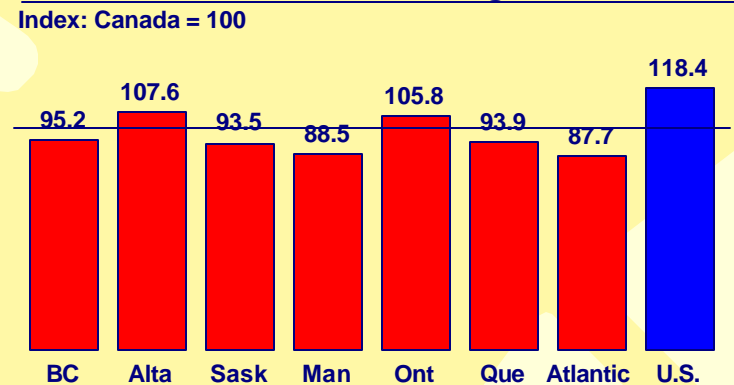
**Productivity* Growth
1984-1997**



* Labour productivity for the total economy; based on GDP at factor cost per worker.

Source: IC calculations based on Statistics Canada data

**Productivity*
1995-1996 average**



* Labour productivity for the total economy; based on GDP at market prices (per worker) to allow for comparison with U.S.; and Statistics Canada PPP.

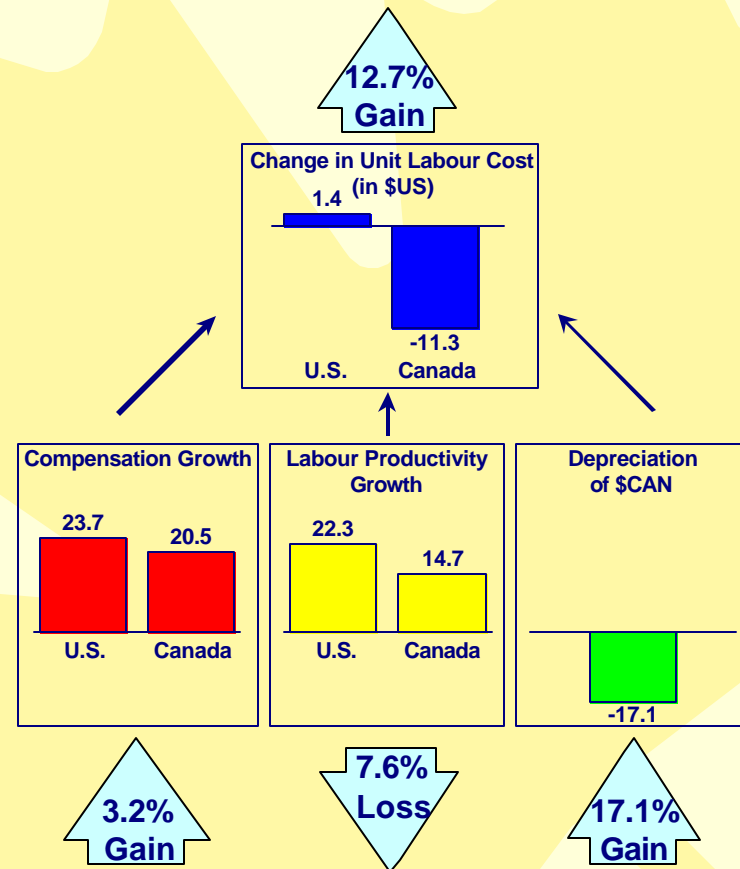
Source: IC calculations based on Statistics Canada data

Our weak productivity performance is also subtracting from our international competitiveness

The improvement in Canada's cost competitiveness vis-à-vis the U.S. in the 1990s has been mostly due to a depreciating Canadian dollar.

- Our manufacturing productivity grew only at about two-thirds the U.S. rate during the 1990s (i.e., 22.3% vs 14.7%).

Change in Competitiveness — Manufacturing 1990-97 (Percent)*



* Based on logarithmic decomposition, therefore growth rates may differ from published growth rates.

Source: US Bureau of Labour Statistics (April 1999).

Concluding Messages: Productivity, sustainable competitiveness and standards of living go hand-in-hand

- Much analysis has been produced recently about Canada's productivity performance, with many methodologies and data used to examine the issue, and a variety of opinions on how to best interpret the growth rate data. Some confusion about what all these data mean is understandable.

There is a consensus, however, that a country's level of productivity is a fundamental determinant of its standard of living. Canada's level of productivity is significantly below that of the U.S., and this is the key determinant of the large standard-of-living gap between Canada and the U.S. — we should and can do better.

- If we wanted to achieve similar real income per capita levels as the U.S., Canadian productivity growth would need to be much faster than that of the U.S., and over a sustained period — growing roughly at the same rate as the U.S. is not good enough.

For example, assuming that U.S. labour productivity continues to grow by 1.0% per year, closing our standard-of-living gap would require that Canada's productivity growth average 3.3% per year over the next 10 years — three times as fast as the Canadian and U.S. average over the last 20 years.

For Further Information

We welcome your questions, comments and suggestions? You can reach us by ...

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The *Micro-Economic Monitor* is prepared on a quarterly basis by the Micro-Economic Analysis Directorate of Industry Canada. The Monitor provides a quick and easy-to-read update on Canada's economic performance. It also provides topical in-depth reports on current economic issues from a micro-economic perspective.

The current analysis update was prepared by Dave Dupuis, Joseph Macaluso, and Karen Smith, under the direction of Shane Williamson.

Gary Sawchuk is the General Editor of the Special Features in the *Micro-Economic Monitor*. This quarter's feature was prepared by the Strategic Investment Analysis Directorate, in consultation with Serge Nadeau. Presentation assistance was provided by Caroline Farmer.

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