

Past, Present and Future: Tense

From crisis and recovery to
long-term economic challenges

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Lake Louise



1. Financial crisis and recession

2. Current recovery

3. Looming challenges

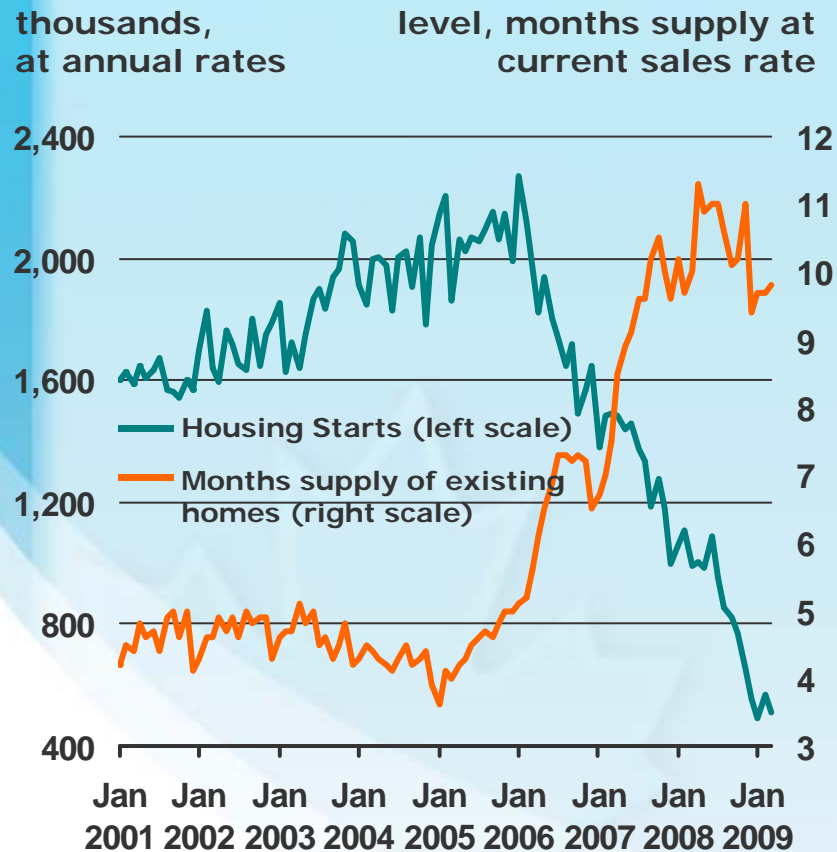
1. Financial crisis and recession

2. Current recovery

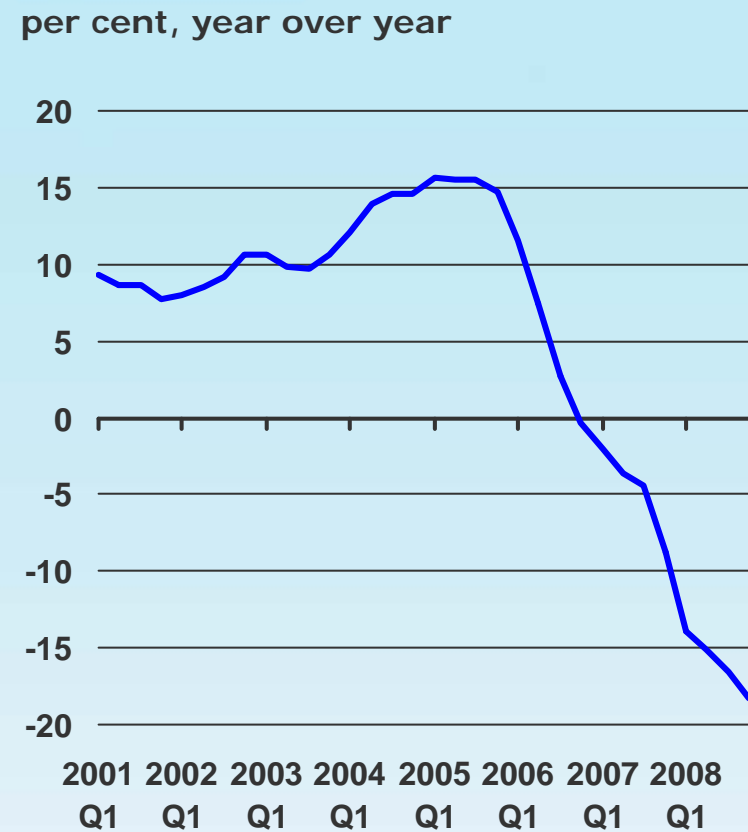
3. Looming challenges

It began in the housing market ...

U.S. Housing Starts and Overhang of Existing Homes

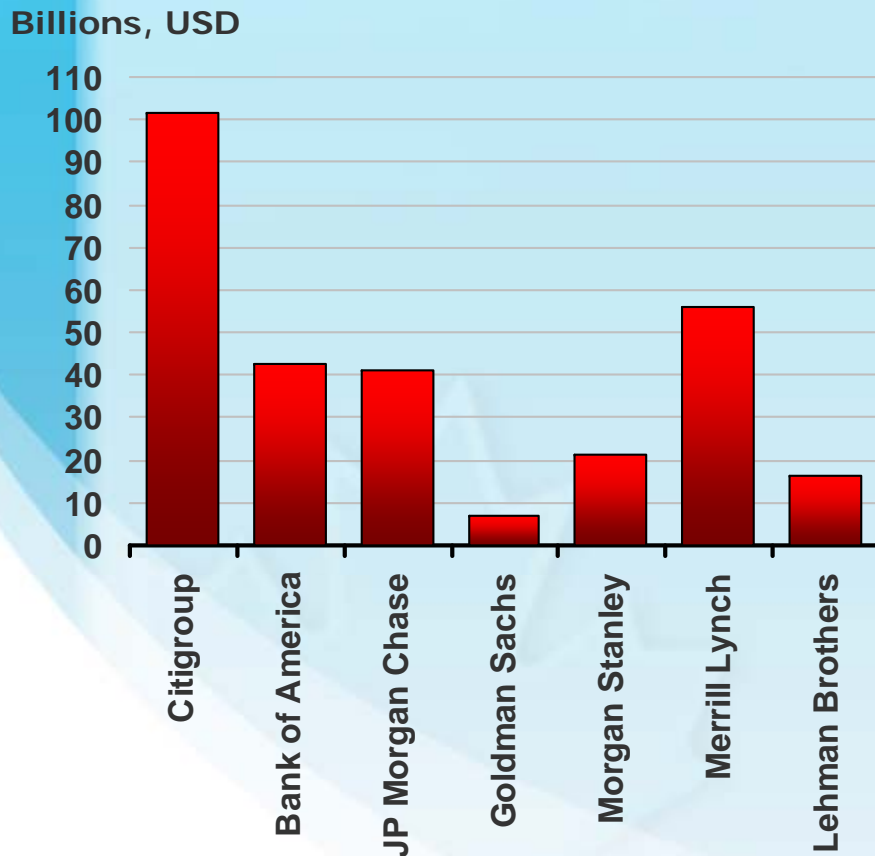


U.S. Home Price Index

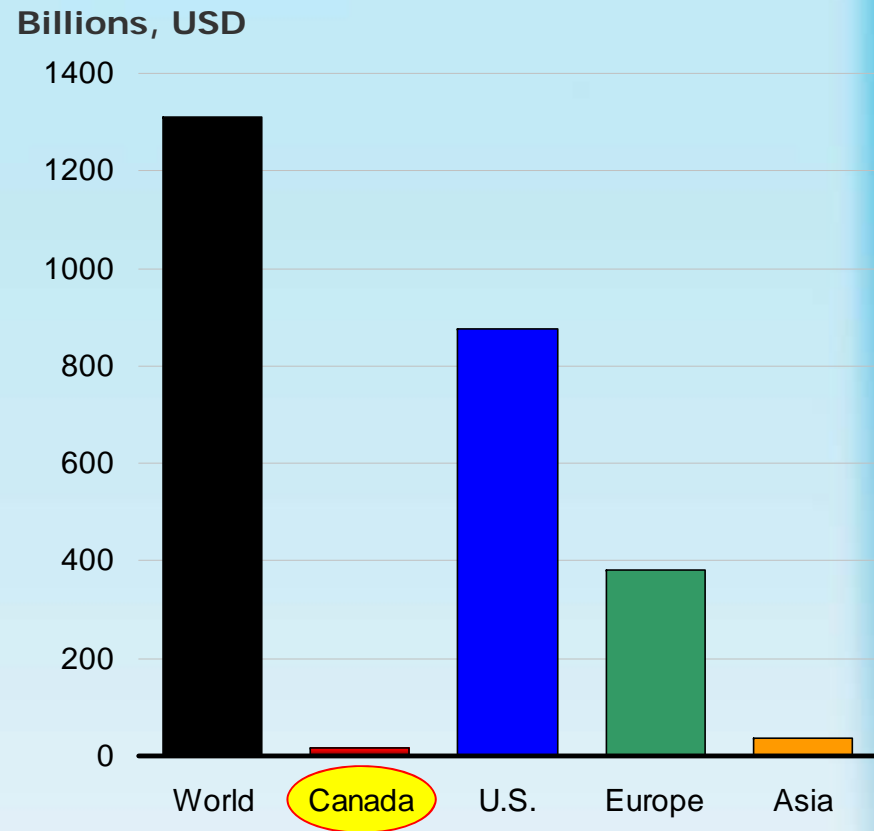


... and led to huge financial losses.

U.S. Write-downs and Losses

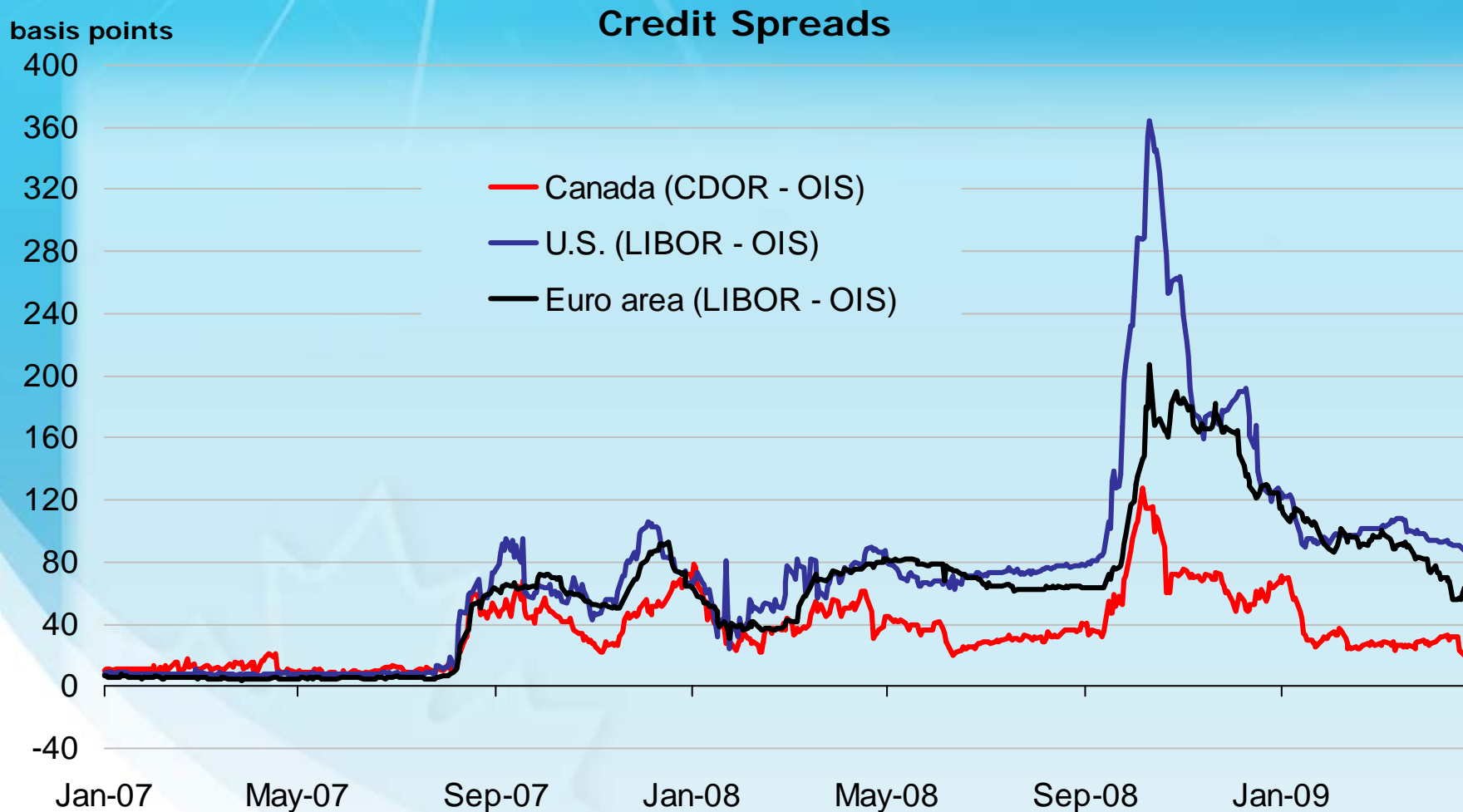


Global Write-downs and Losses Exceed \$1 trillion



Source: Bloomberg. April 17, 2009

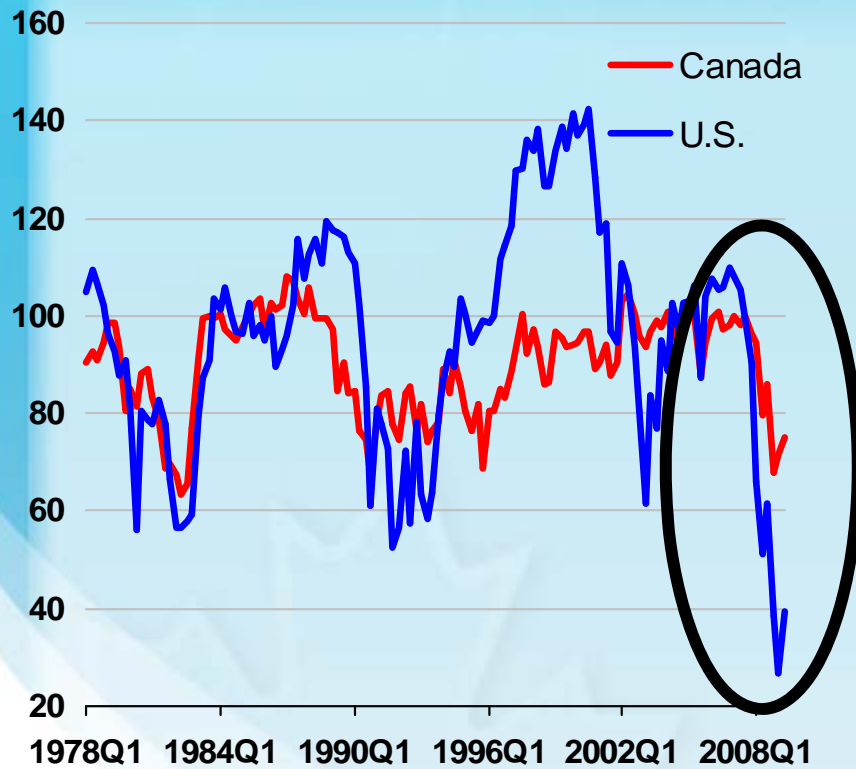
The shock in credit markets ...



Notes: These spreads are a measure of banks' funding costs relative to a risk-free rate and are a gauge of financial market stress and banks' financing pressures. The rate on the overnight-indexed swap (OIS) is used as a proxy for expected overnight rates. LIBOR is the London Interbank Offered Rate. CDOR is the Canadian Dealer Offered Rate. Daily data up to and including April 24, 2009. Source: Bloomberg.

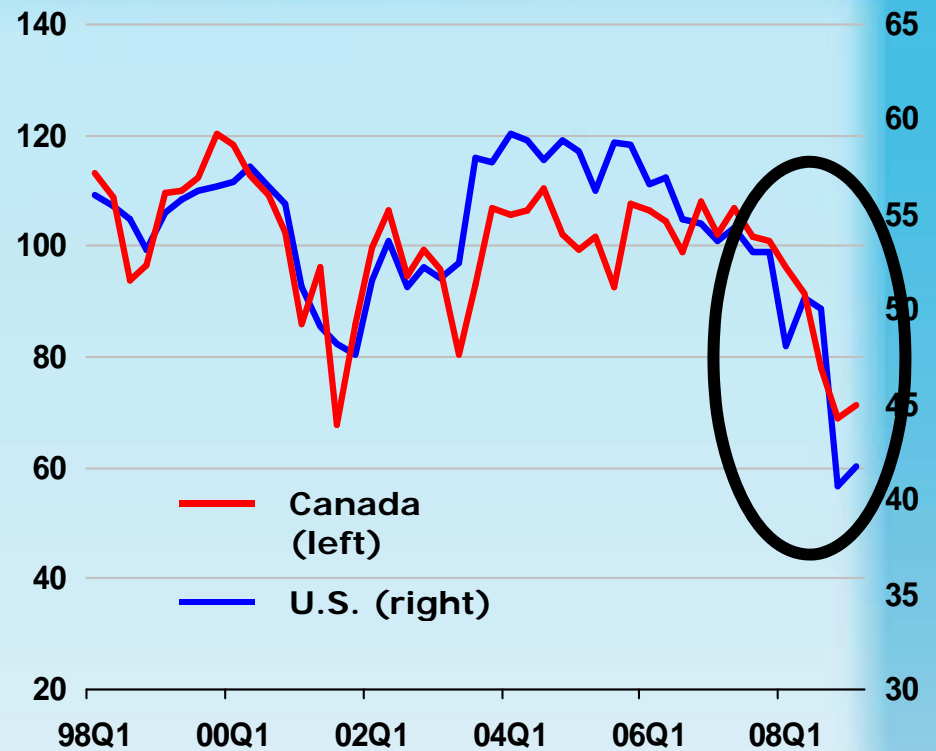
... and the collapse of confidence ...

Consumer Confidence



Index, 2002=100 for Canada, 1985=100 for U.S.

Business Confidence

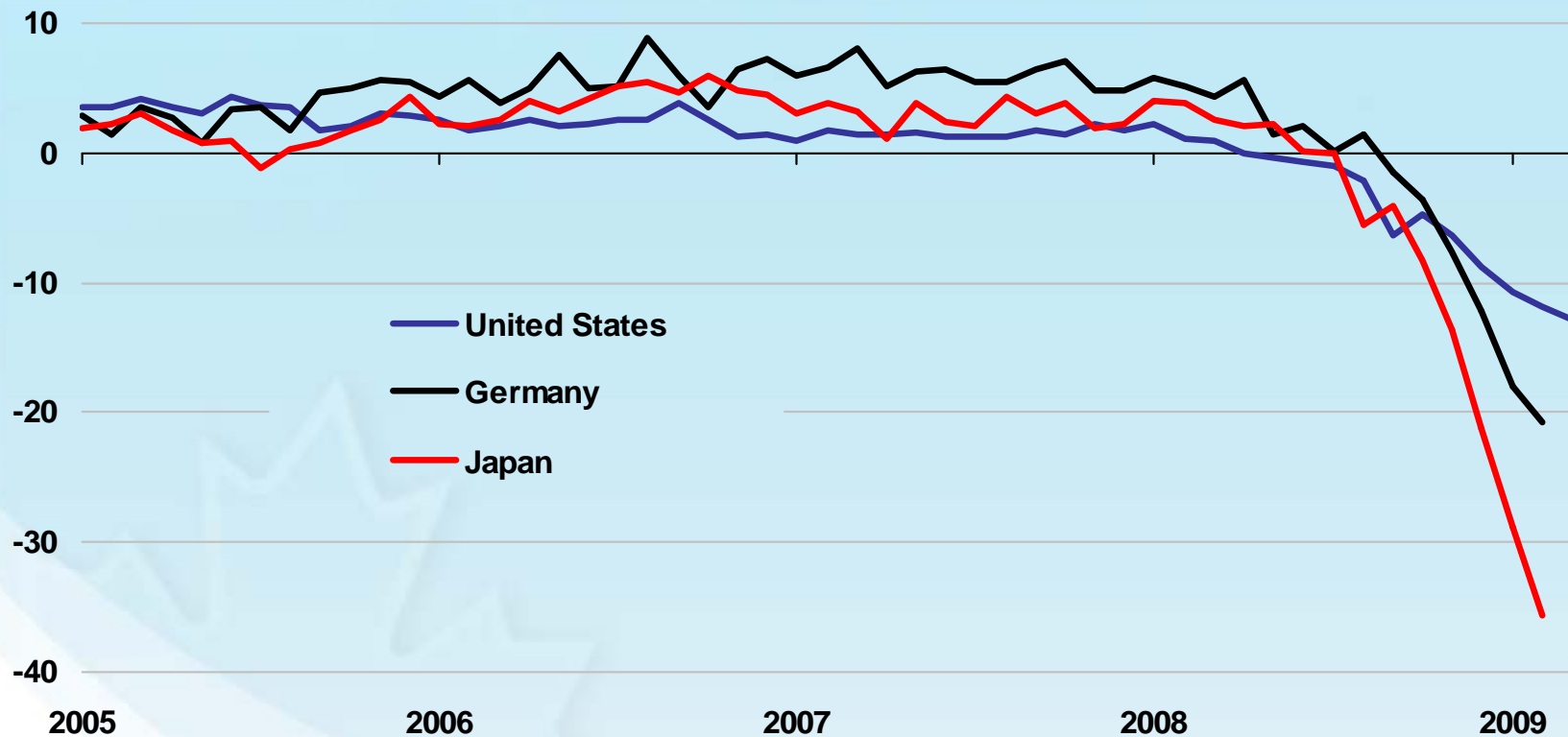


Index, 2002=100

Sources: The Conference Board of Canada.

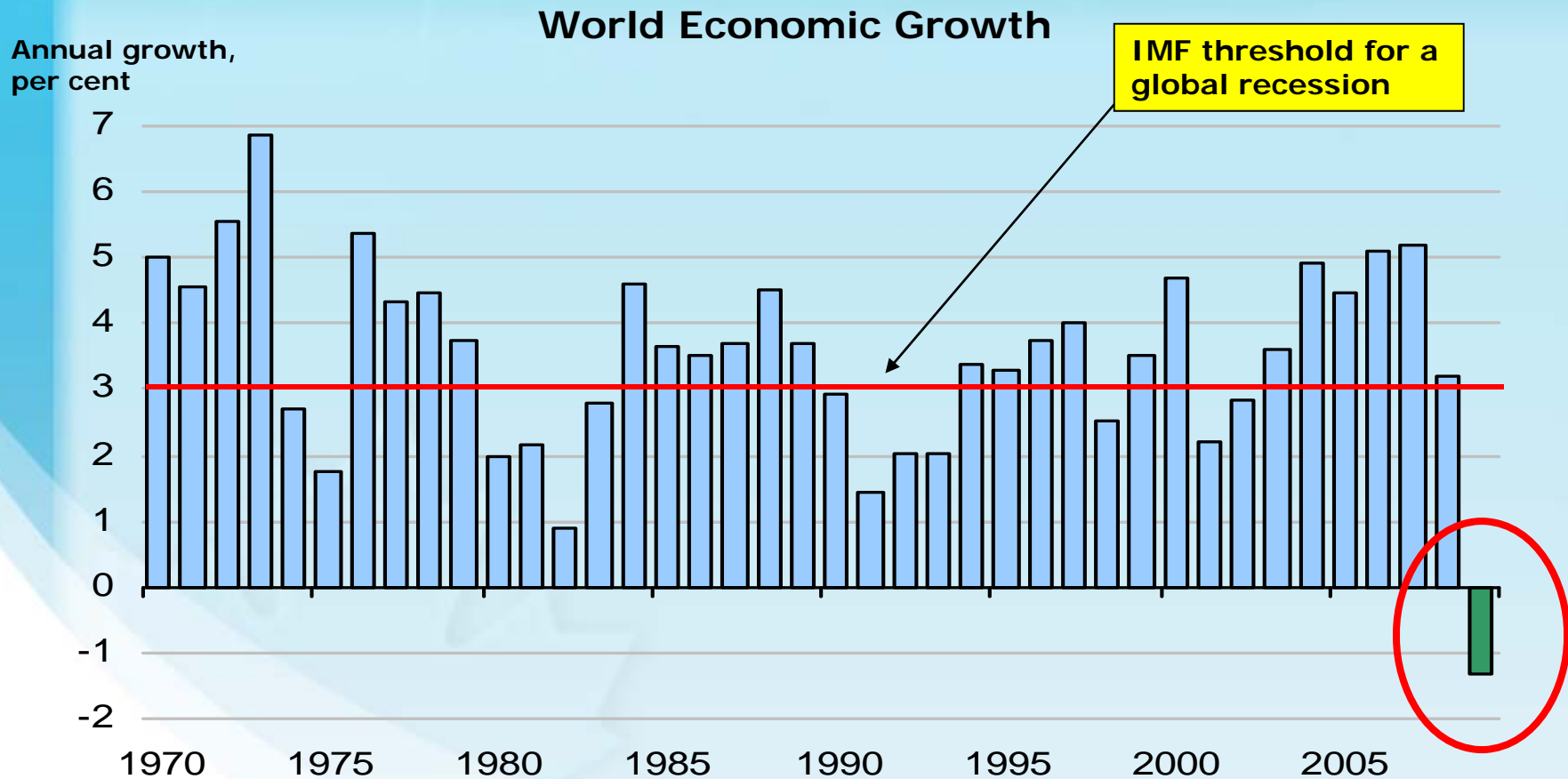
... caused industrial production to fall off a cliff ...

Year-over-year percentage change



Source: Bank of Canada.

... and the first synchronized global recession in over 60 years.



Note: World real GDP growth on a purchasing-power parity basis.
Source: International Monetary Fund *World Economic Outlook*, April 2009.



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A massive policy response ...

1. Monetary policies

- sometimes “unconventional”

2. Financial-market policies

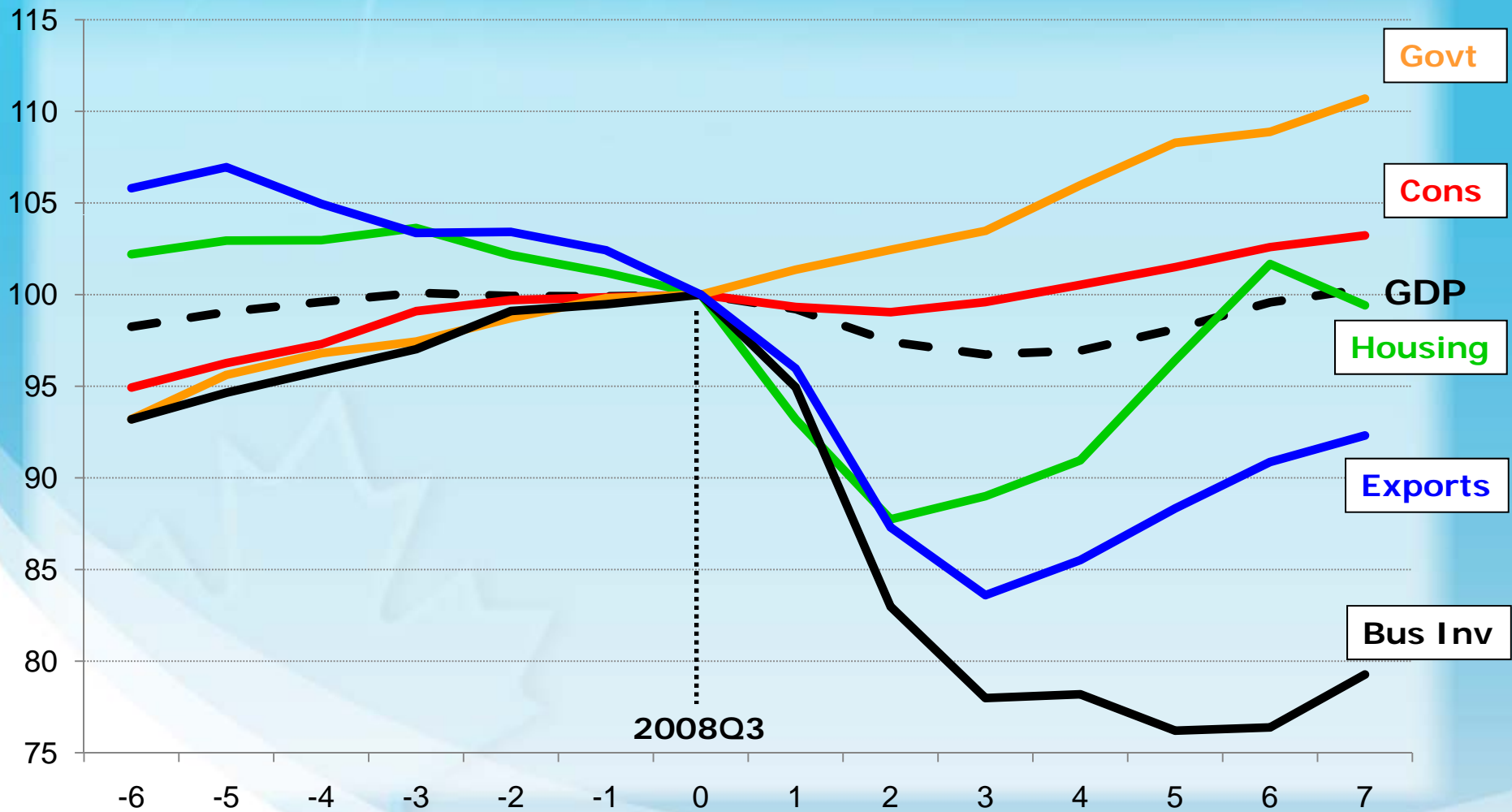
- certainly “unfamiliar”

3. Fiscal policies

- generally “timely, targeted, and temporary”

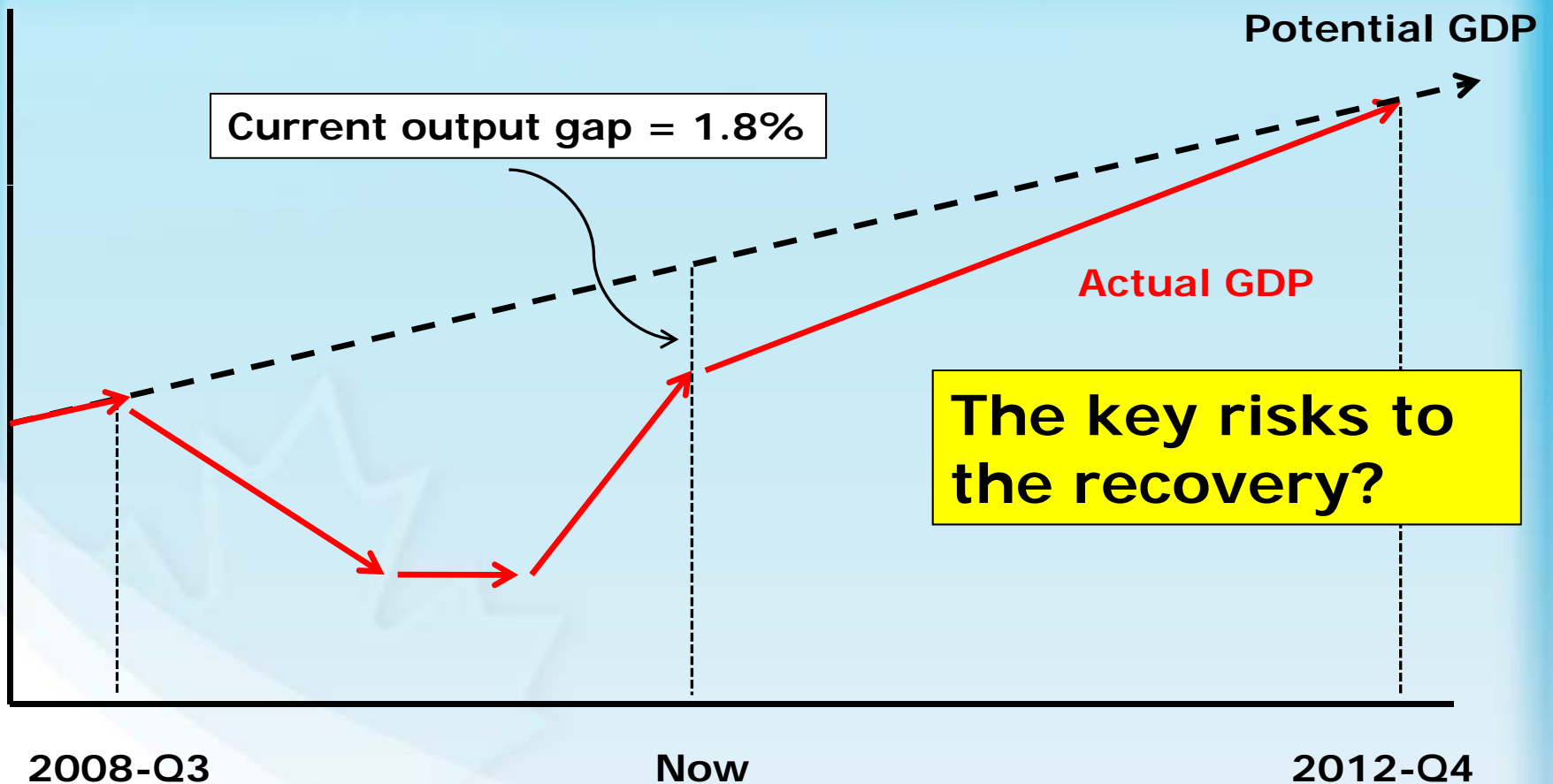
... helped to ensure our recovery ...

Components of Canadian GDP, 2008-2010



Source: Bank of Canada.

... but it will be a while before things are back to "normal".



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- 
- 1. Debt and Demographics**
 - 2. Enhancing Productivity**
 - 3. Climate Change**

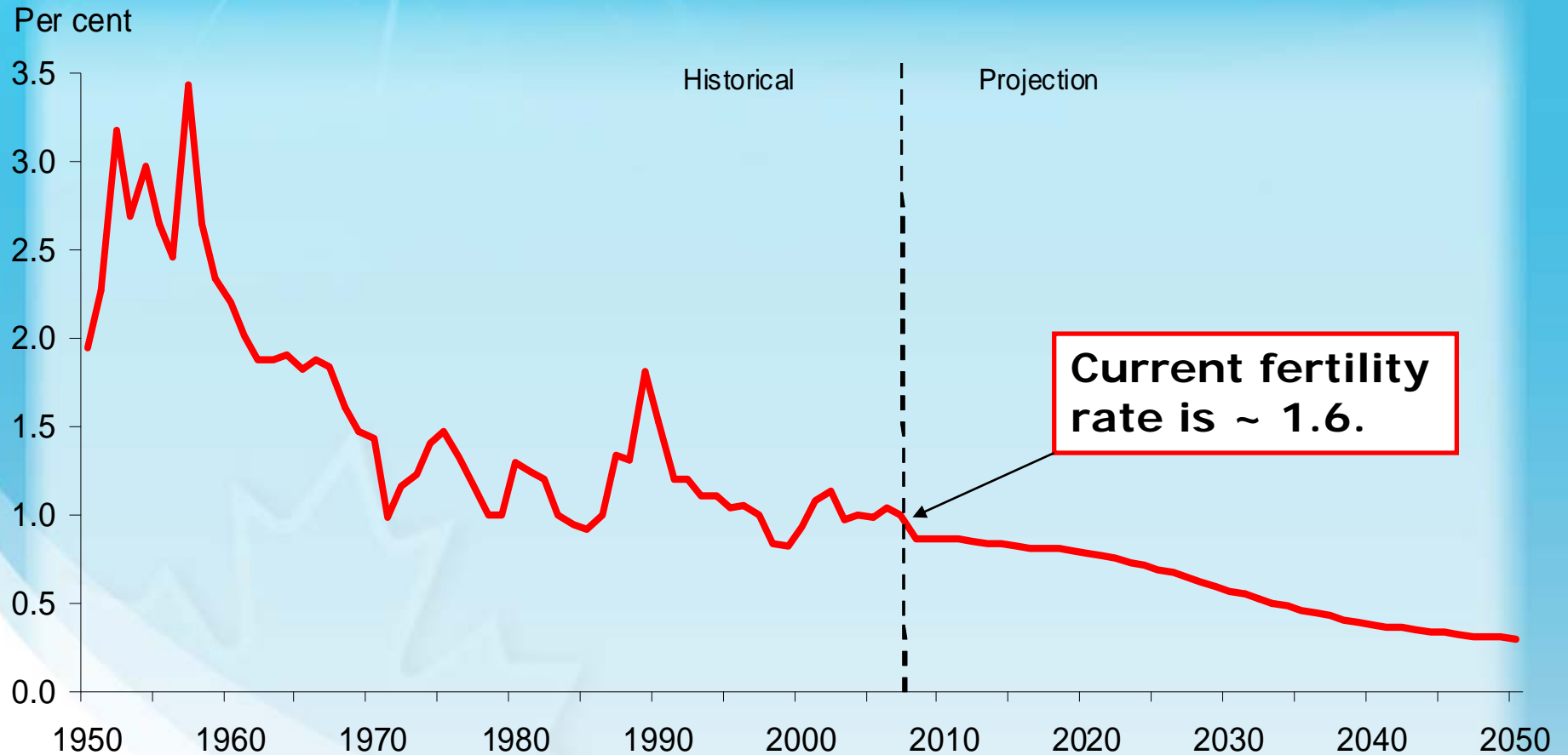
MOTHER HUBBARD,
21ST CENTURY...



Canada's looming demographic "fiscal squeeze" :

- faster growth of expenditures
 - health care
 - elderly benefits
- slower growth of tax base

Declining fertility has been slowing population growth for decades ...

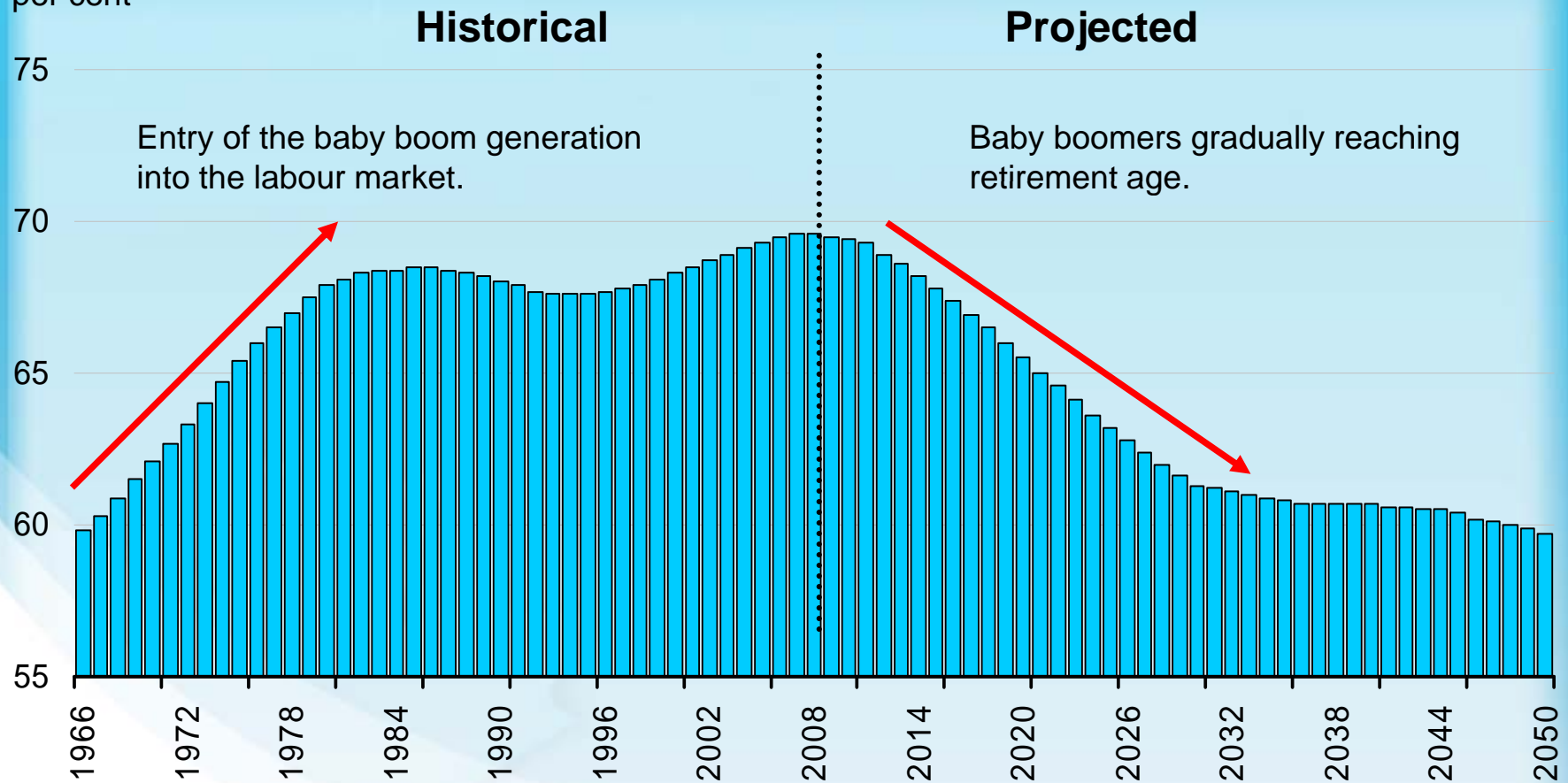


Source: Statistics Canada and Office of the Chief Actuary's 23rd Actuarial Report on the Canada Pension Plan.

... which inevitably leads to aging of the population ...

Share of age 15-64 in total population

per cent

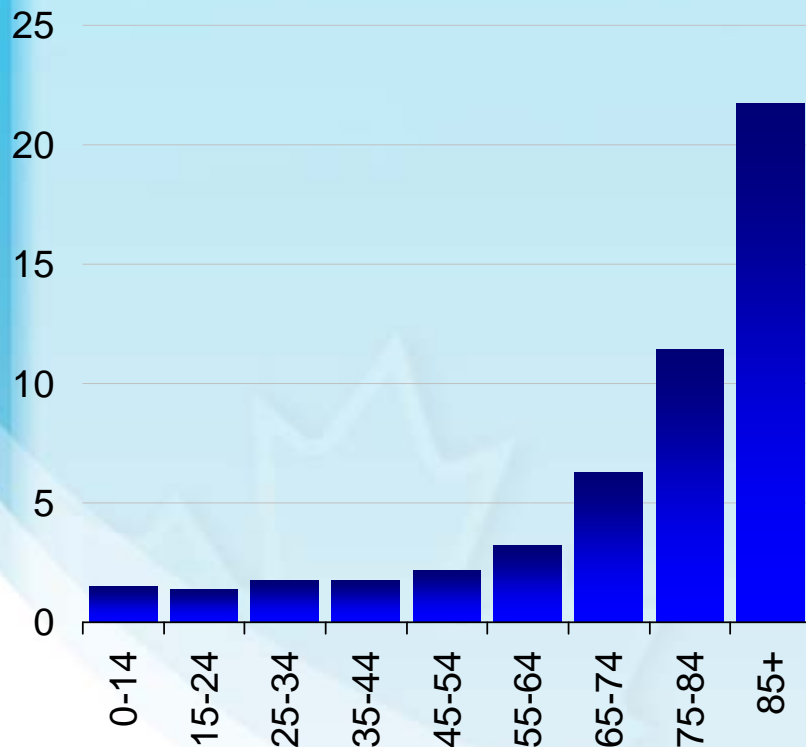


Source: Department of Finance Calculations based on Statistics Canada and Chief Actuary data

... and an increase in "age-related" spending.

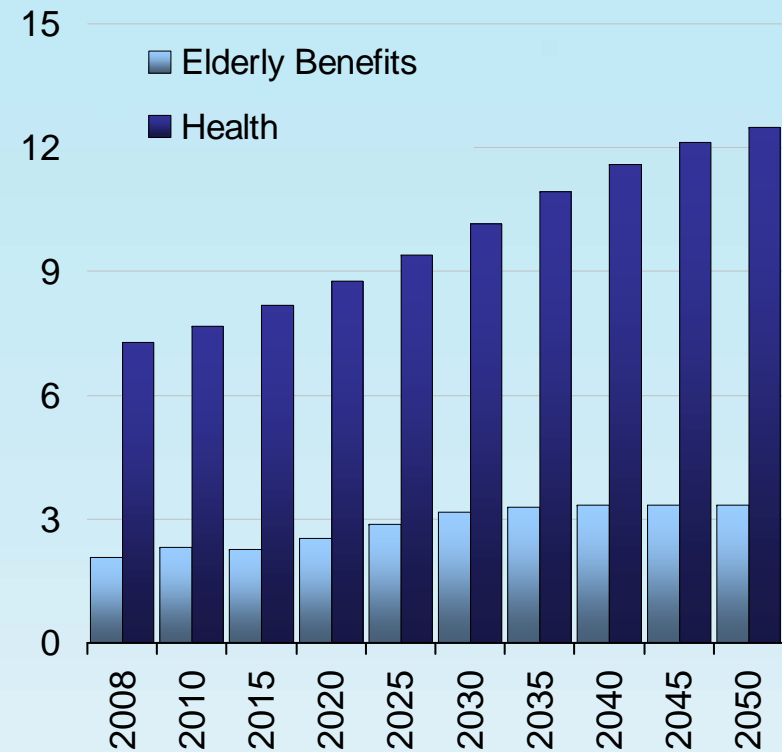
Health spending per capita

Thousands, Per capita



Health spending and elderly benefits

% of GDP



Source: Department of Finance Calculations

How to address this fiscal squeeze?

1. Improve efficiency in health-care delivery?
2. Reduce growth of “other” spending?
3. Increase taxes?
4. Increase borrowing? → more debt

How big is this problem?

Suppose we hold constant:

- "other" spending as share of GDP

We need to avoid a return to the "debt wall" of the mid 1990s!

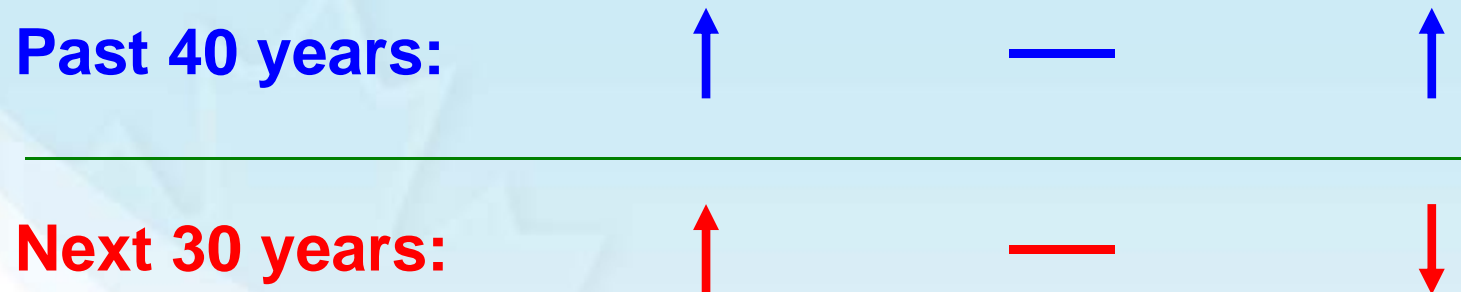
→ Total public debt rises by ~ 50-60 ppts between 2020 and 2050.

Enhancing Productivity

What drives “material” living standards?

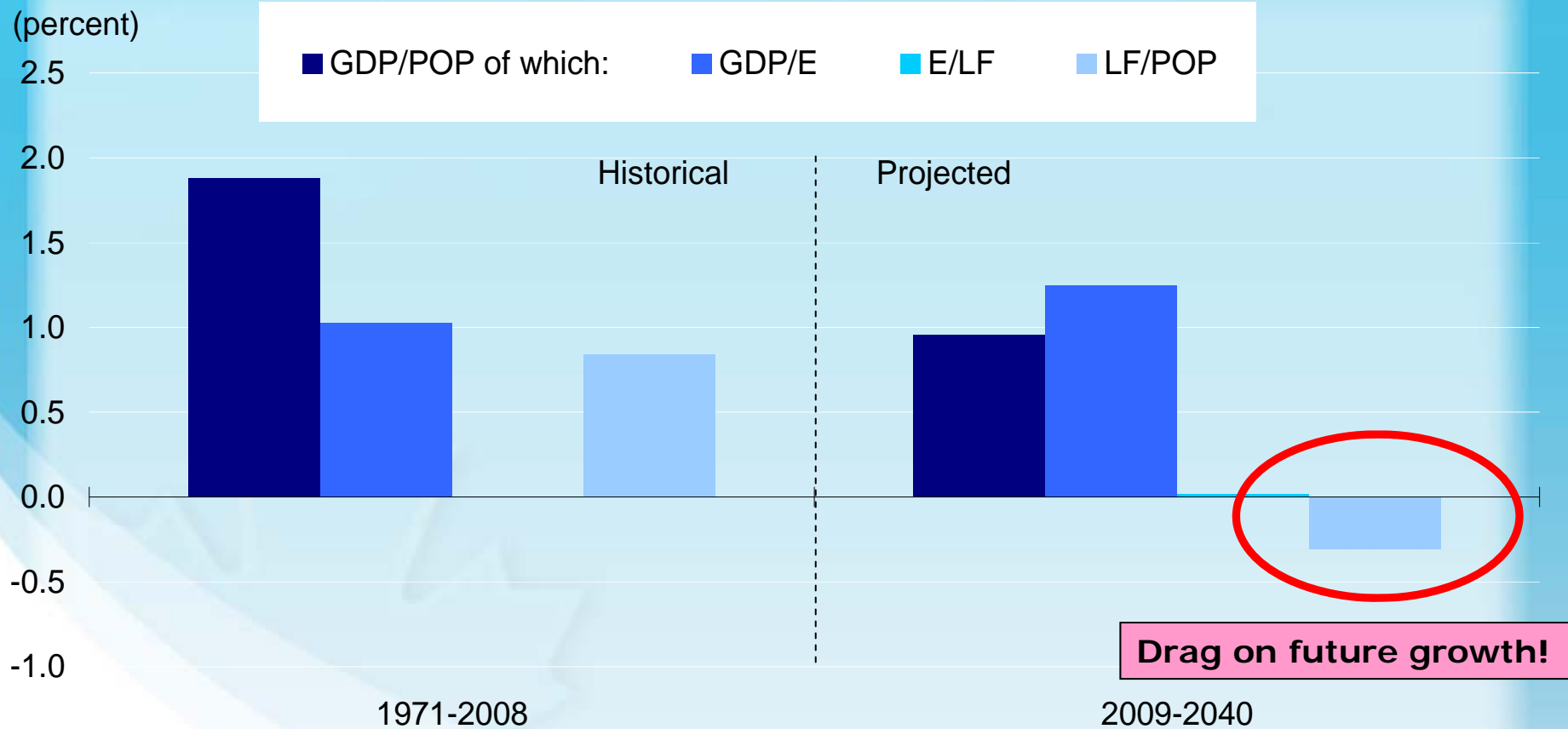
$$\text{GDP/POP} = (\text{GDP/E}) \times (\text{E/LF}) \times (\text{LF/POP})$$

Per capita GDP = (labour productivity) x (employment rate) x (LF part. rate)



Sources of growth, past and future:

Decomposition of per capita Real GDP Growth

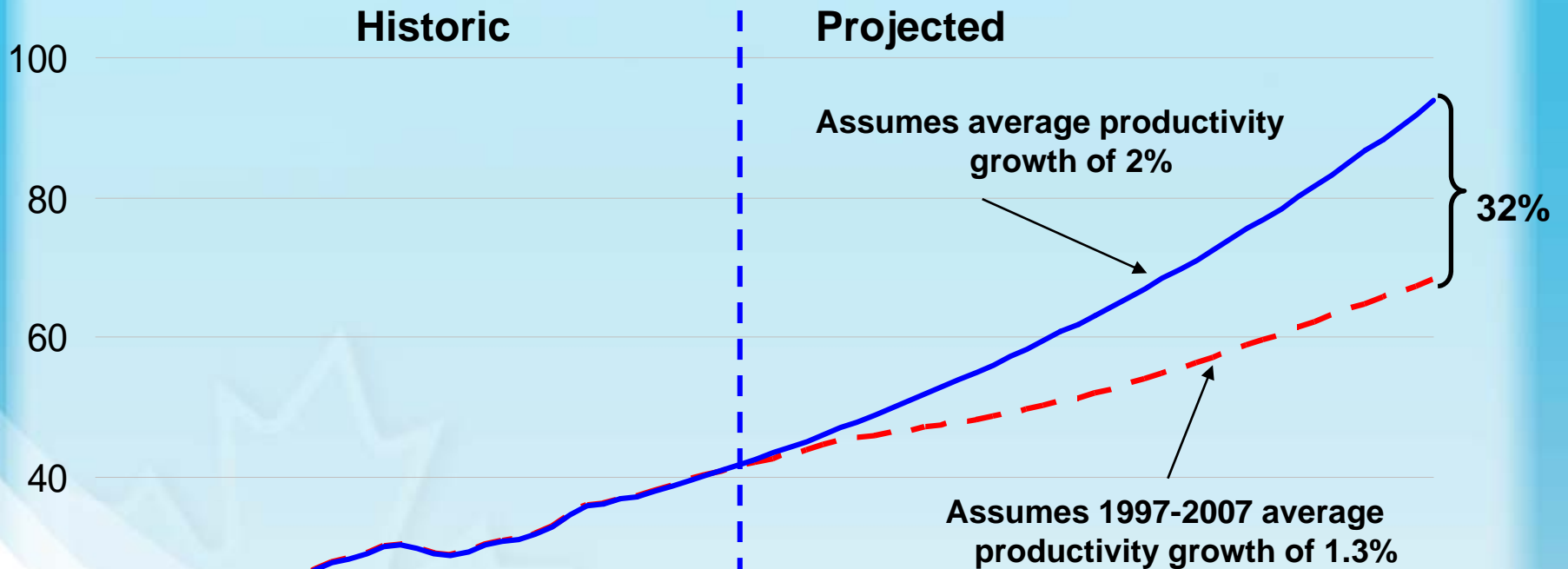


Source: Finance Canada calculations consistent with January 2009 average private sector forecast

Small differences in growth rates matter a lot over the long term!

Real GDP Per Capita (Dollars)

Chained \$2002, Thousands

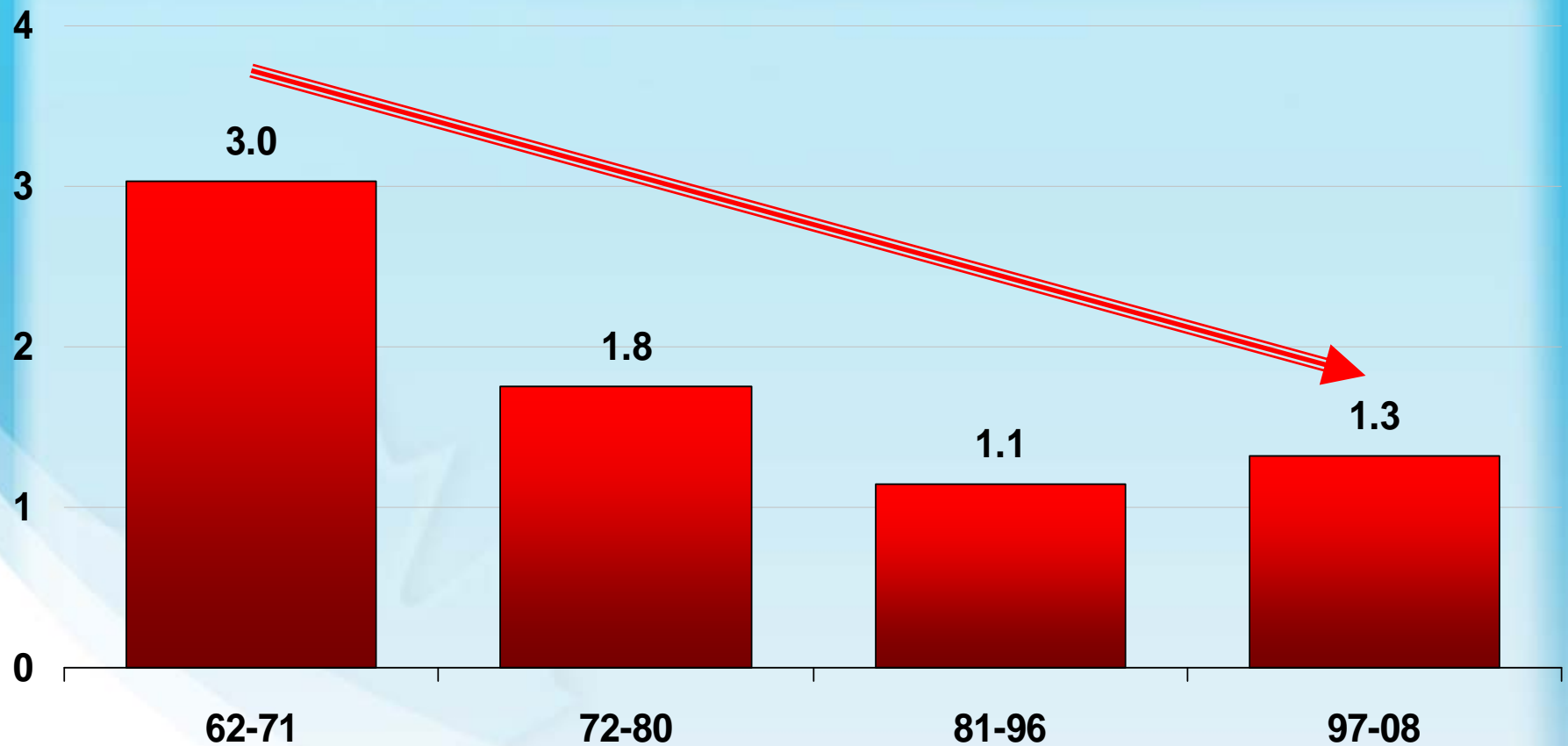


→ We need to raise our productivity growth rate!

But we have a worrying trend:

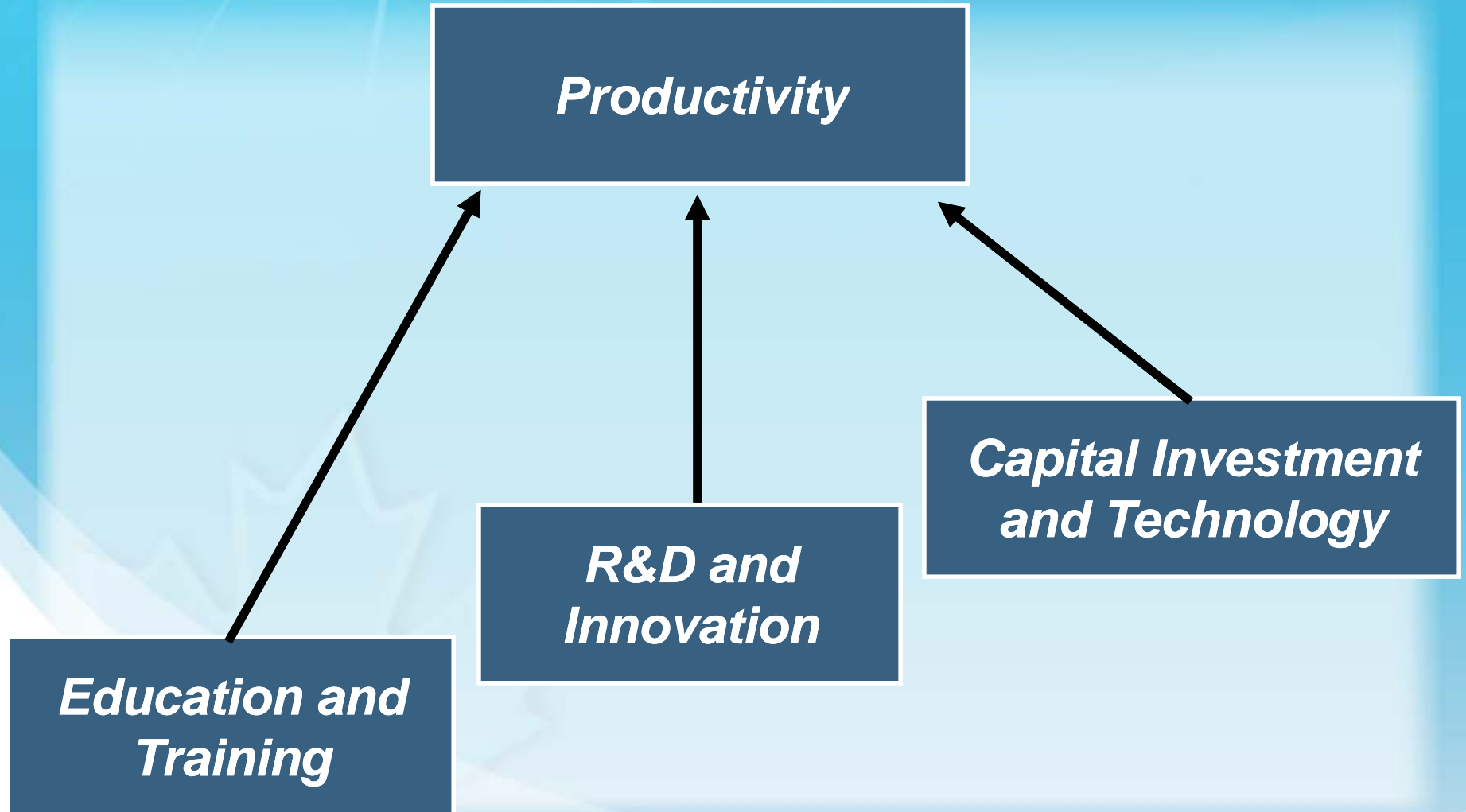
Canada's Average Annual Productivity Growth (GDP per hour)

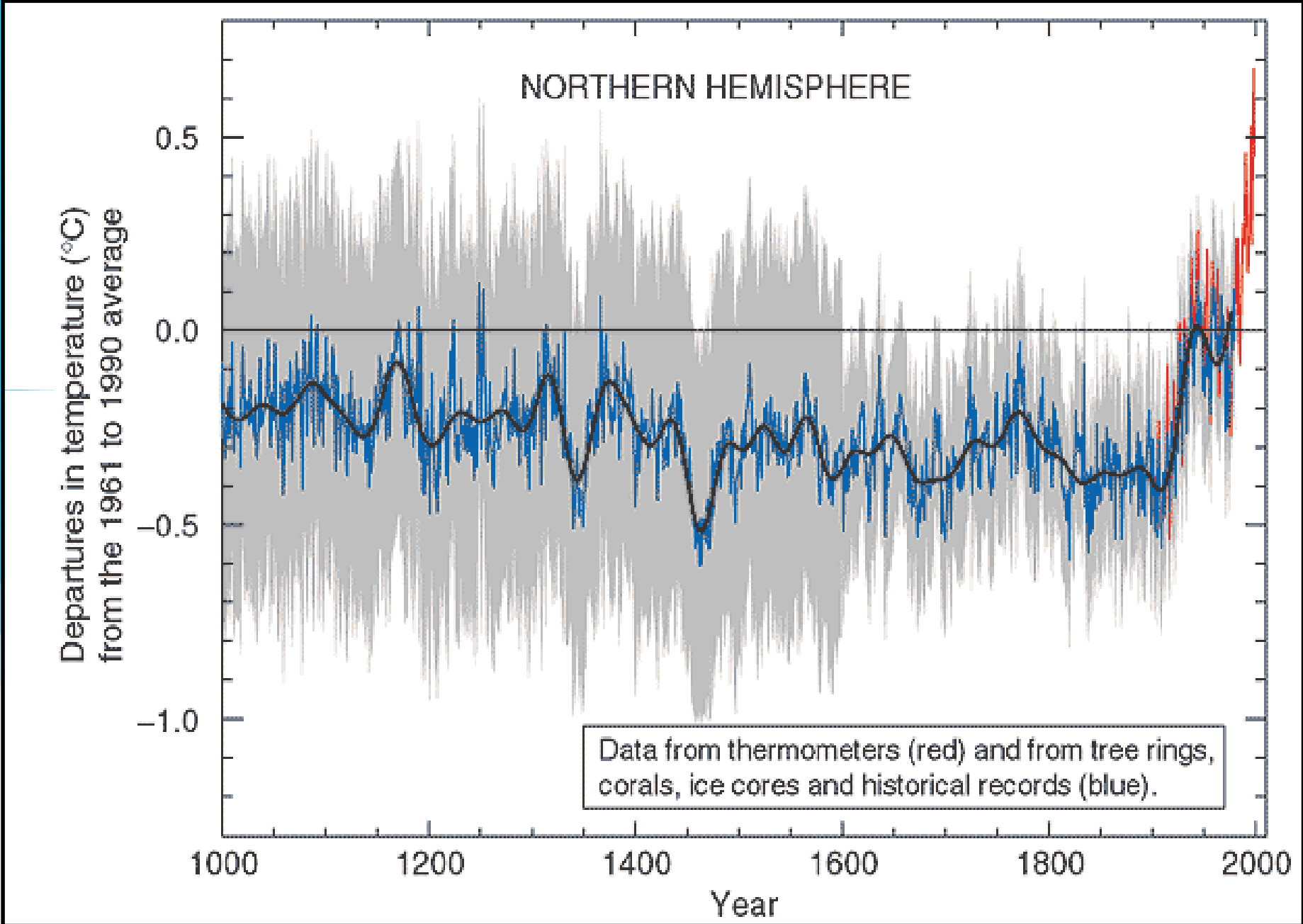
Per cent



Notes: Total economy labour productivity measured using hours. Source: Center for the Study of Living Standards

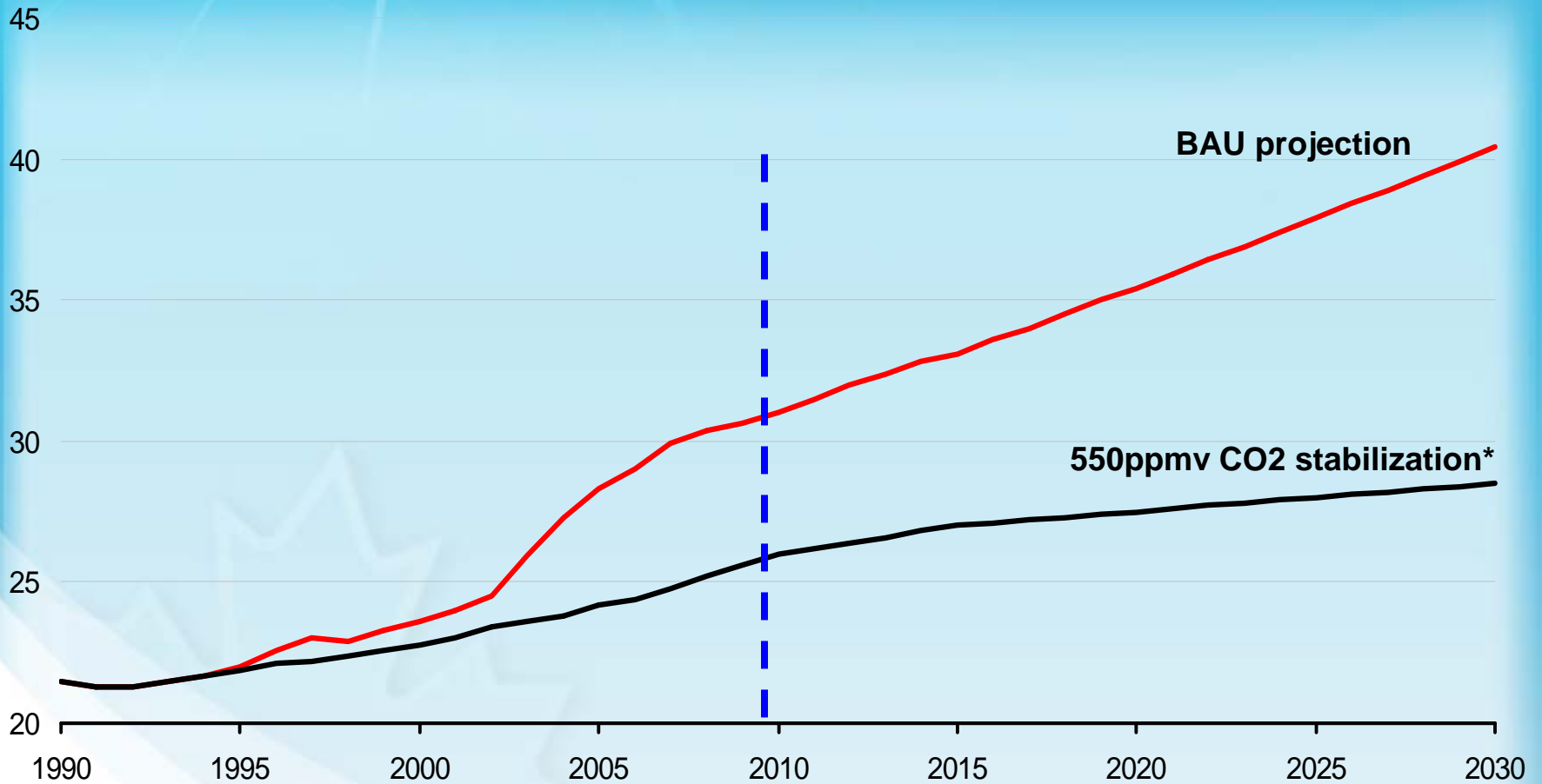
Where does productivity growth come from?





Projected Global GHG Emissions, 1990-2030

Billions Mt of CO₂



* 550 ppmv (parts per million volumes) of CO₂e is the greenhouse gas concentration that is targeted to keep global temperatures from rising beyond 2°C of preindustrial levels. Source: Department of Energy, Energy Information Agency, International Energy Outlook 2009 and IPCC

Predicted impacts from global warming:

- 1. Melting Greenland and Antarctic ice caps**
- 2. Rising sea levels → low island states**
- 3. Creeping desertification**
- 4. Falling agricultural productivity**

Reducing GHG emissions is difficult!

1. Stock vs. flow.

2. Link between GHG emissions, energy use, and GDP.

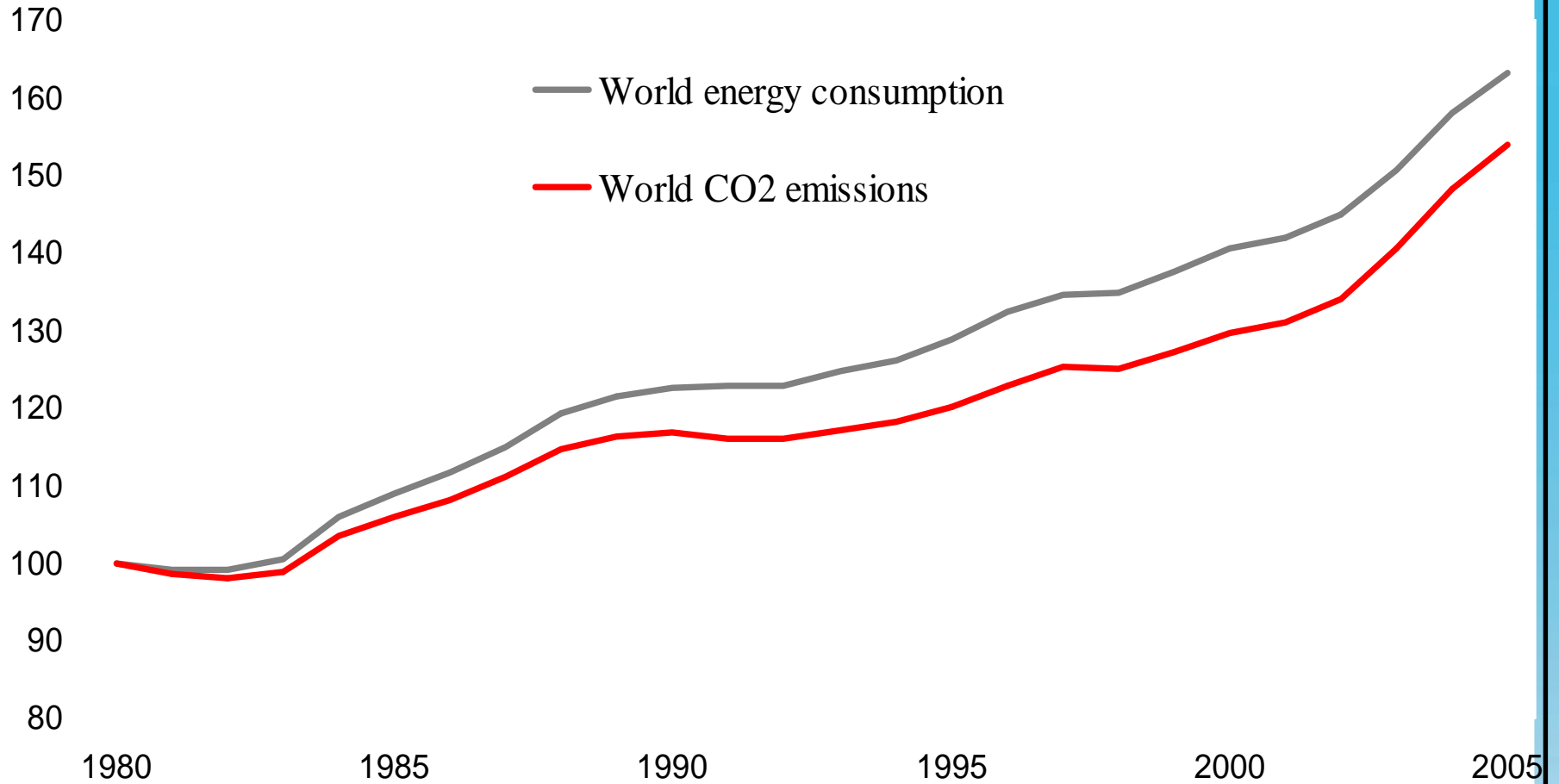
→ Challenge:

How to reduce GHG emissions without reducing living standards?

→ A huge technological challenge.

World energy consumption and energy-related CO₂ emissions

Index 1980 = 100



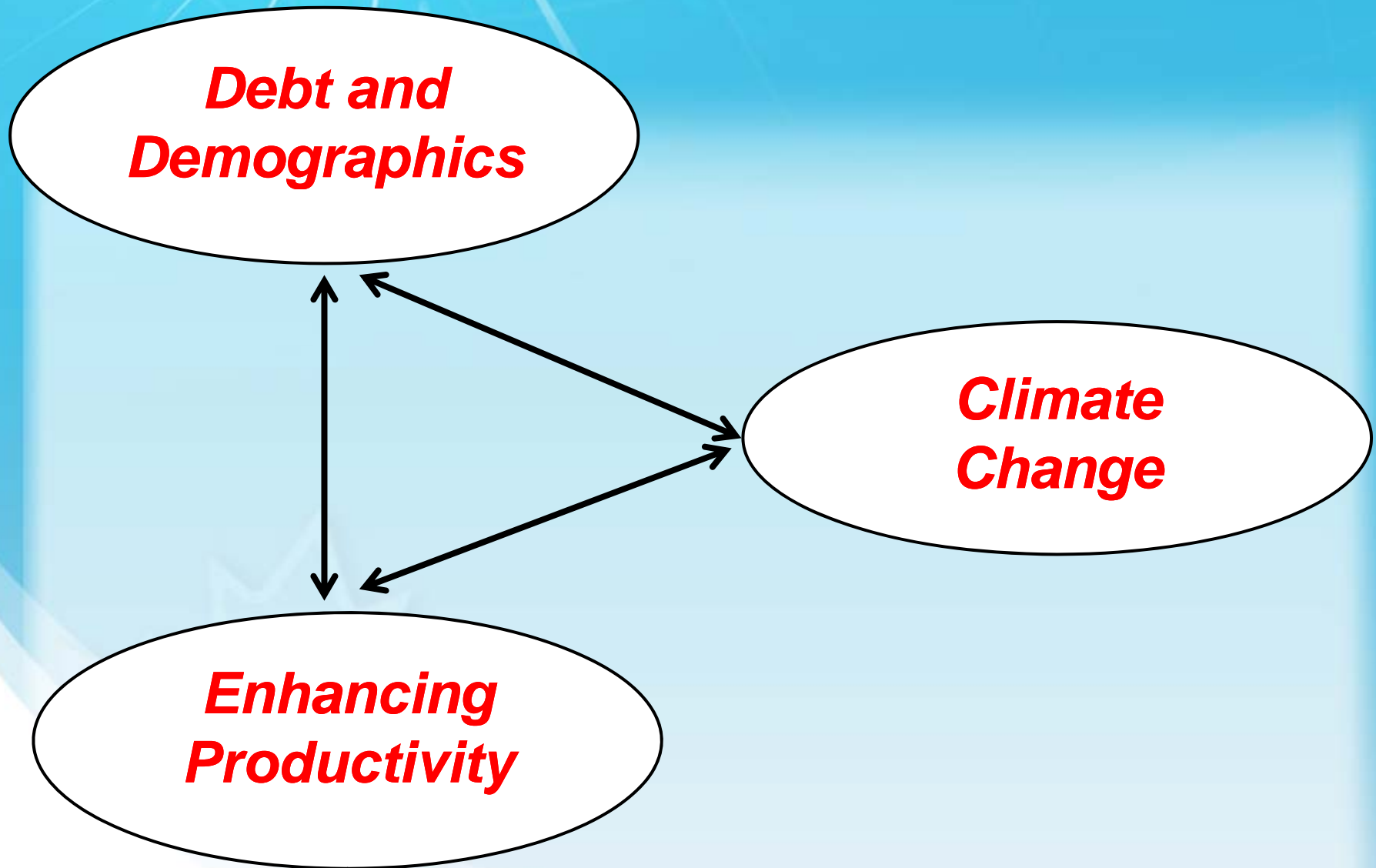
Reducing GHG emissions will have significant economic effects:

- 1. Increase the costs of using carbon-based fuels.**
 - 2. Labour and capital will move between sectors and regions → winners and losers.**
 - 3. Modest decline in growth rate of GDP.**
- A huge challenge of political will**

Plenty of thorny policy issues:

- 1. Carbon tax vs. "cap and trade"?**
- 2. Regional and sectoral reallocations?**
- 3. Public support for new technologies?**
- 4. The scope for international trading?**
- 5. Tense international negotiations.**

Canada's Looming Economic Challenges



Thank you.
