Canada's Looming Demographic "Fiscal Squeeze"

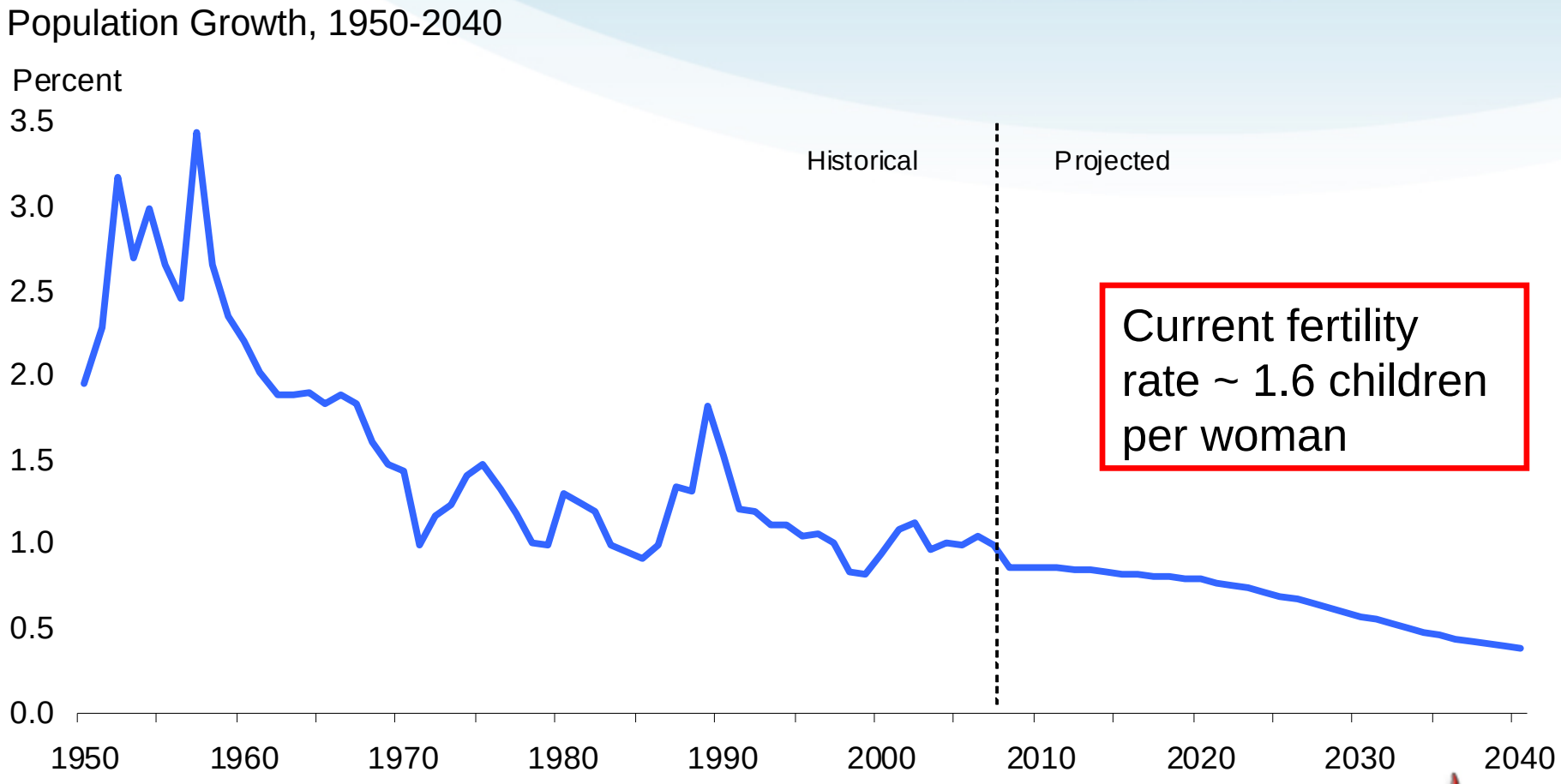
Christopher Ragan

Department of Economics
McGill University
and
Clifford Clark Visiting Economist
Finance Canada

Outline of Talk

1. The basic demographics of aging
2. A looming “fiscal squeeze”
3. Arithmetic thought experiments
4. A few thorny issues
5. Summary and final thoughts

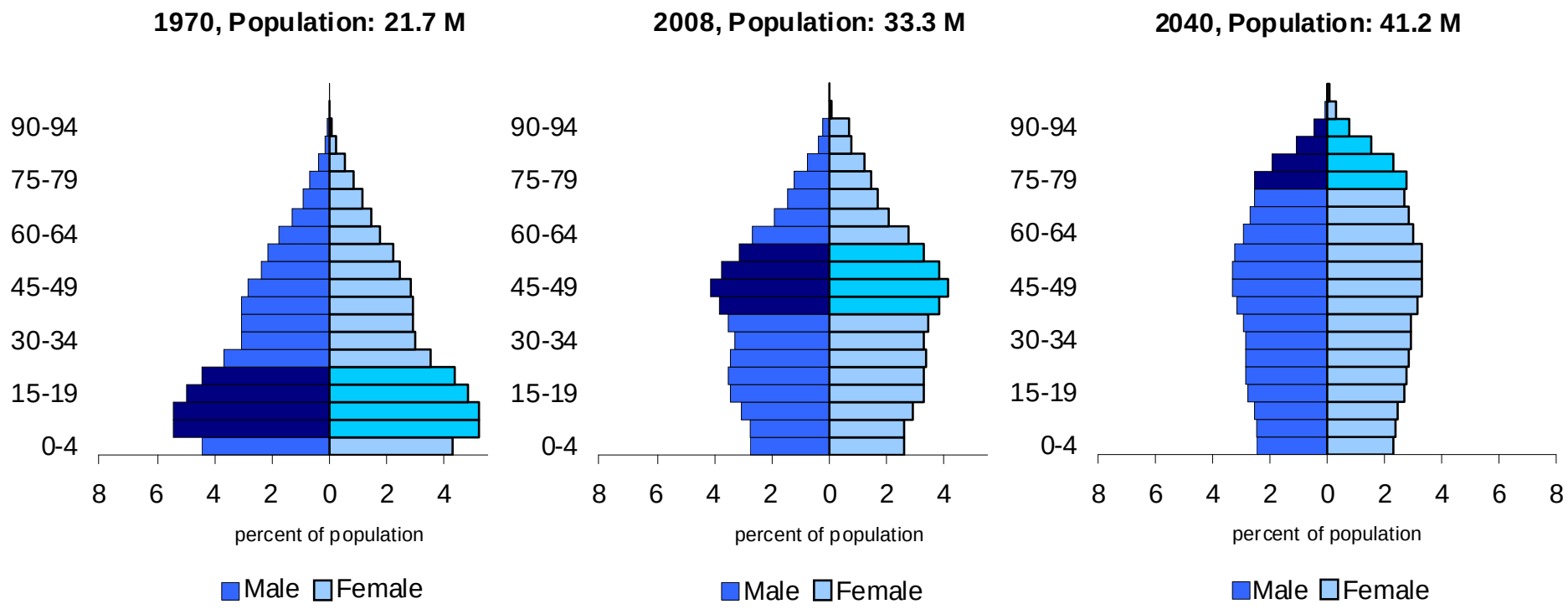
A declining fertility rate has reduced the population growth rate …



Population Growth = Births + Net Immigration – Deaths

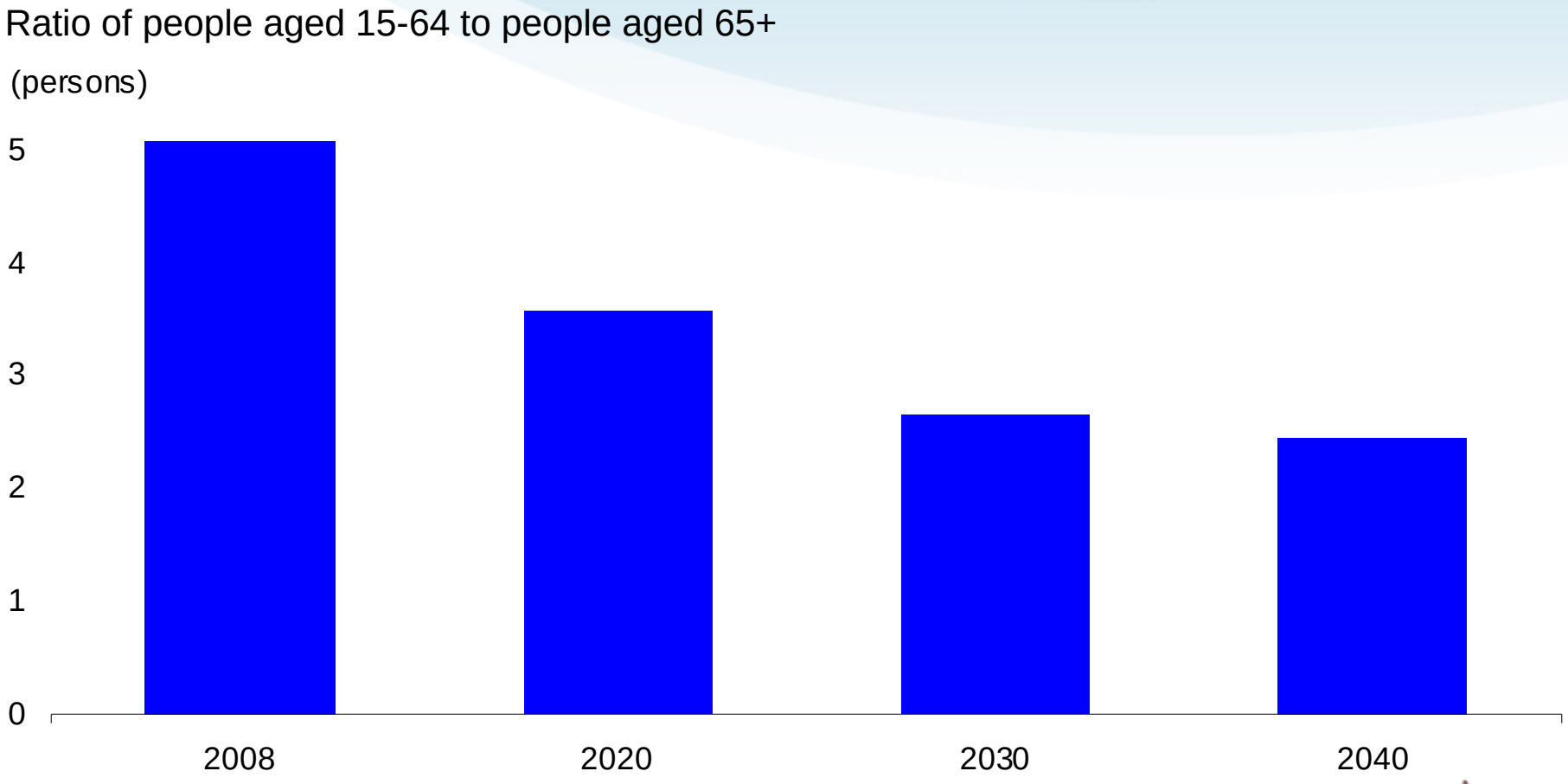
… which inevitably leads to population aging.

Distribution of the Population By Sex and Age Group



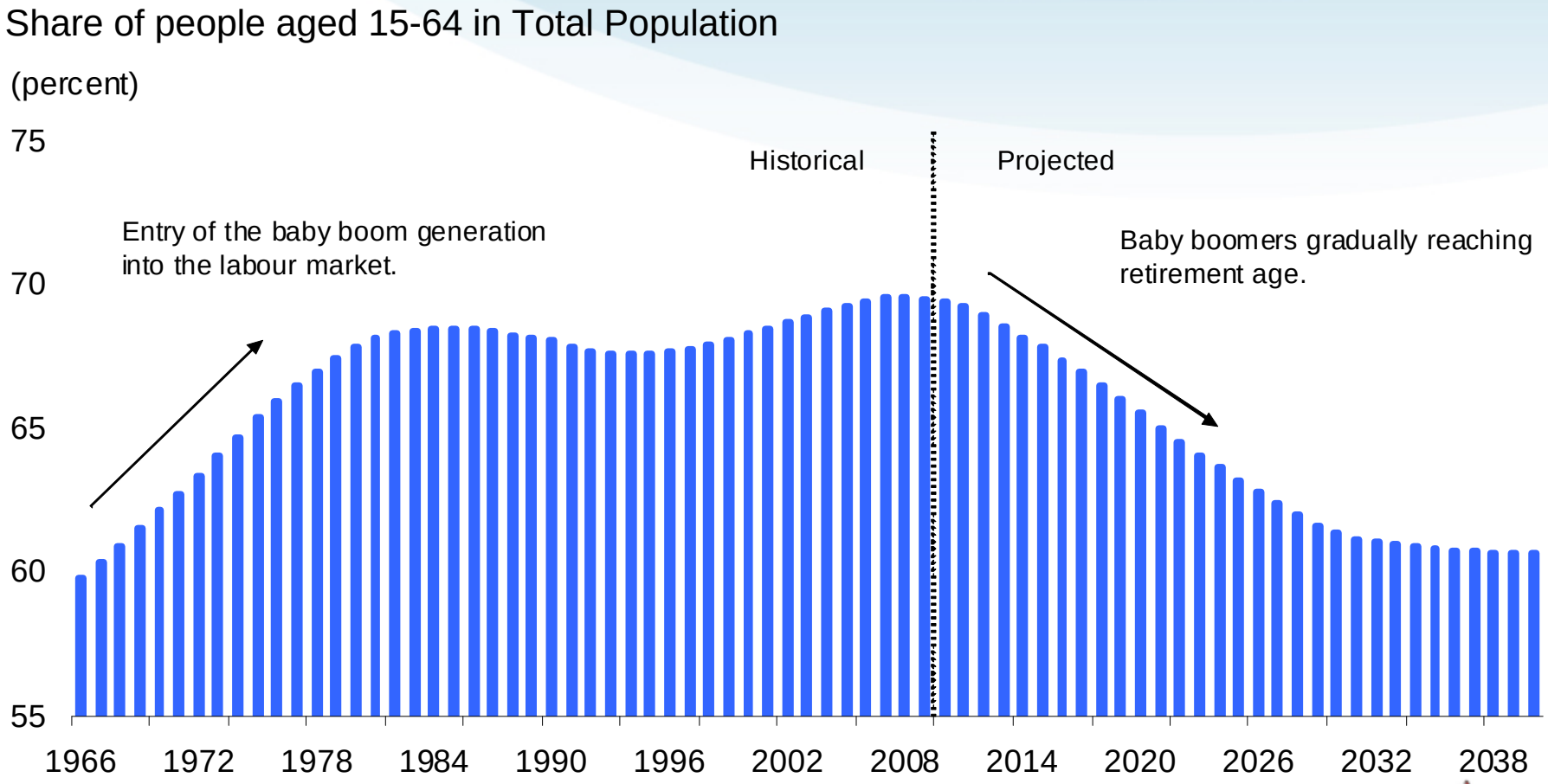
Source: Office of the Chief Actuary's 23rd Actuarial Report on the Canada Pension Plan and Statistics Canada.

By 2040, Canada's "providing ratio" will fall by half.



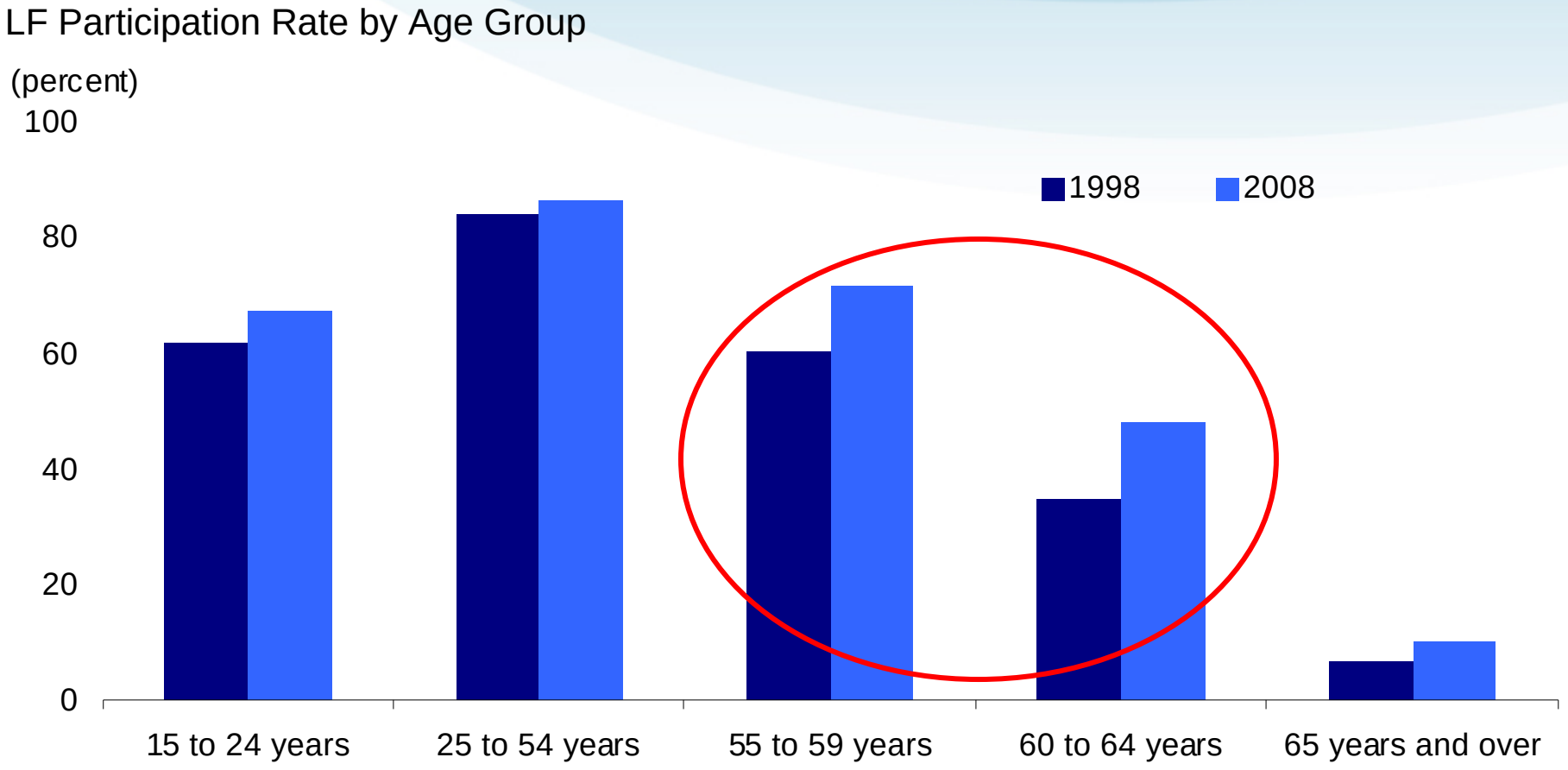
Source: Statistics Canada and Office of the Chief Actuary's 23rd Actuarial Report on the Canada Pension Plan.

Aging will dramatically reduce the working-age share of the population …



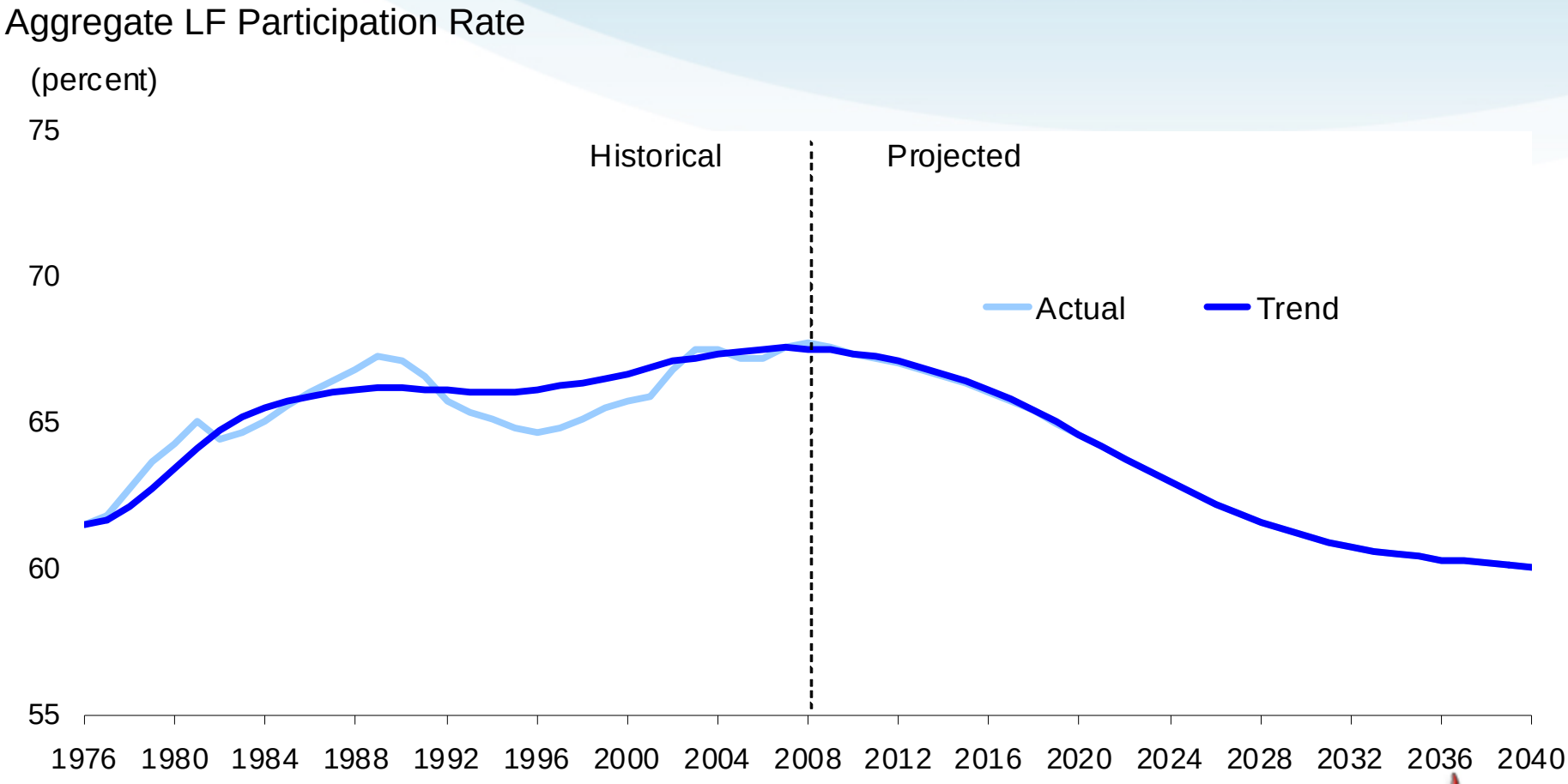
Source: Office of the Chief Actuary's 23rd Actuarial Report on the Canada Pension Plan.

… and will also cause a shift toward groups with lower LF participation rates …



Source: Statistics Canada.

… resulting in a reduction in the aggregate labour-force participation rate.



Source: Statistics Canada and Finance Canada calculations.

Part 1 of the demographic “fiscal squeeze”

Declining LF participation rate:

➔ reduced growth in real per capita GDP

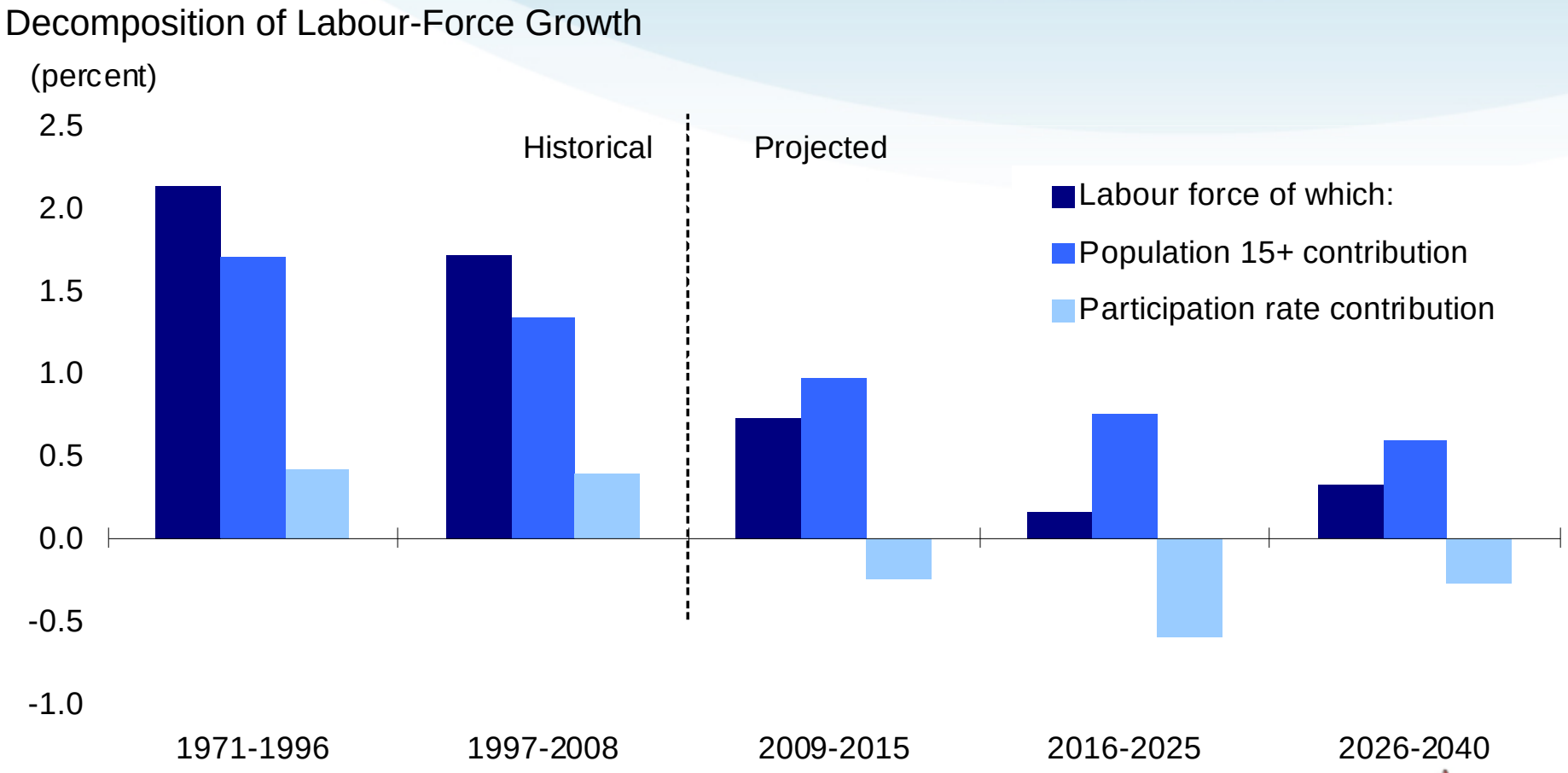
(for given productivity growth)

➔ reduced growth in per capita tax base

GDP/POP = (GDP/E) x (E/LF) x (LF/POP)

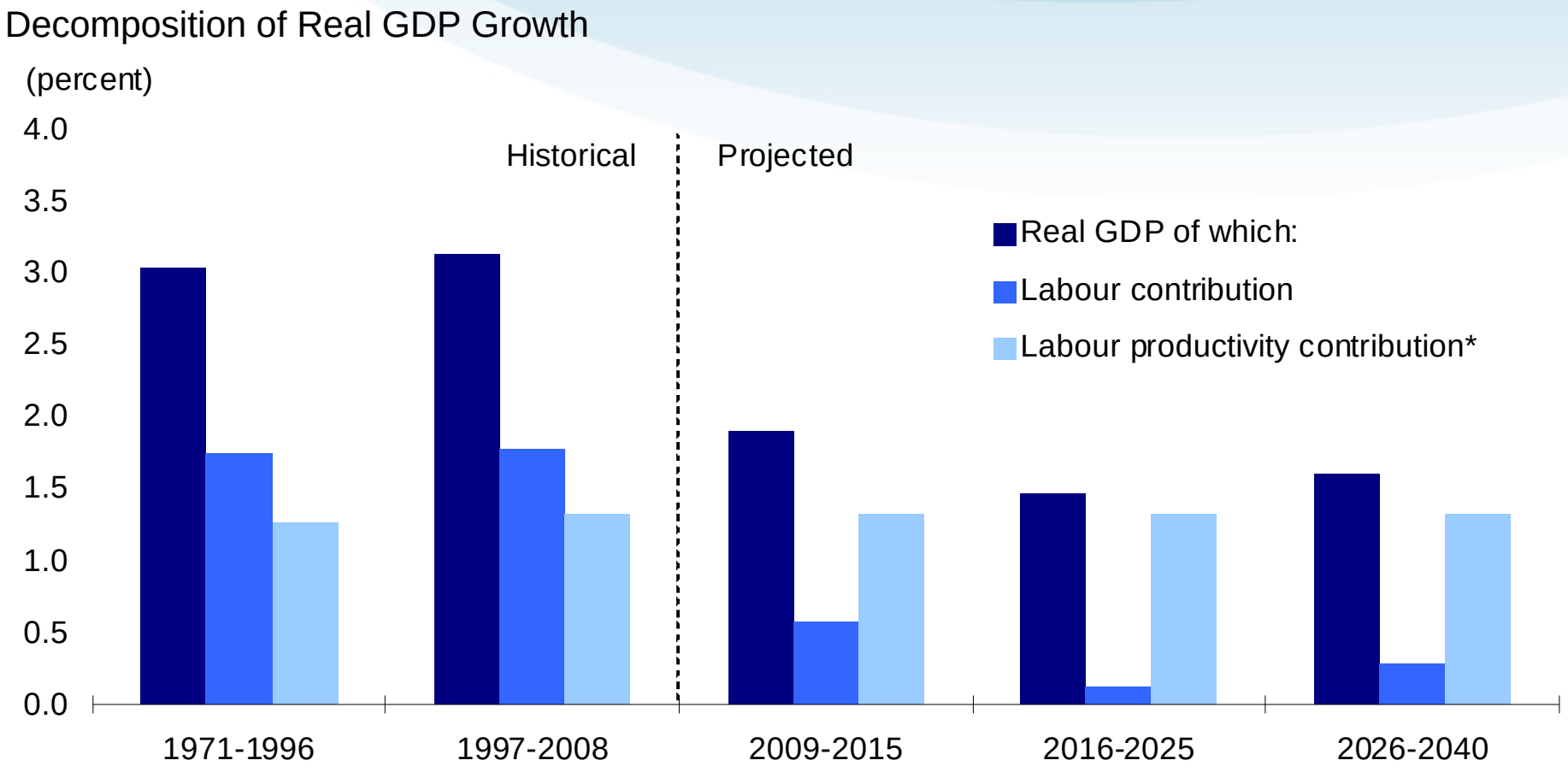
↑ — ↓

The reduction in future labour-force growth.



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

The reduction in real GDP growth.



* Assumes future labour productivity continues to grow at the average annual rate experienced between 1997 and 2008 (1.3%)

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

Part 2 of the demographic “fiscal squeeze”

1. Need for more public spending:

   - Health-Care Spending
   - Elderly Benefits

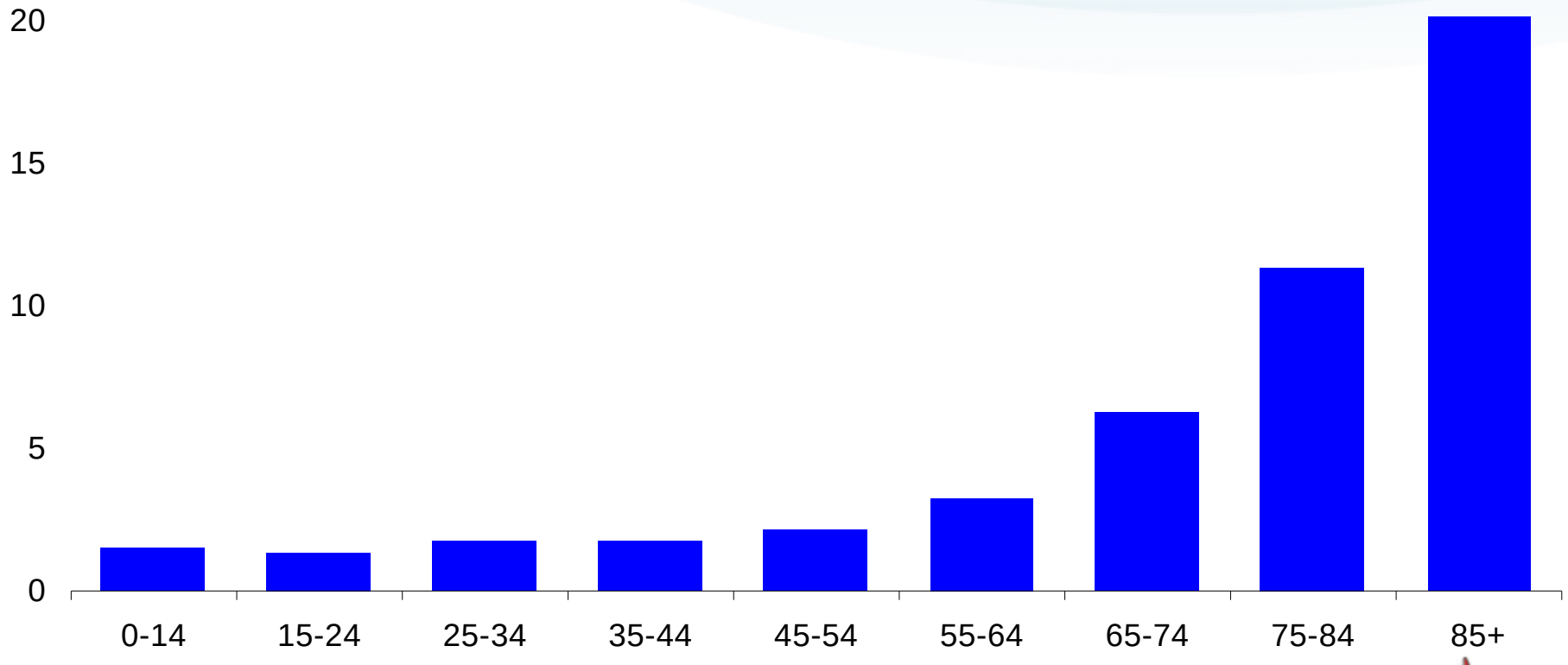
2. Offsetting effects expected to be small:

   - Education, children’s benefits and some social services

Not surprisingly, per capita health-care expenditures rise rapidly in later years of life …

Per Capita Provincial-Territorial **Public** Health Spending by Age Group, 2006

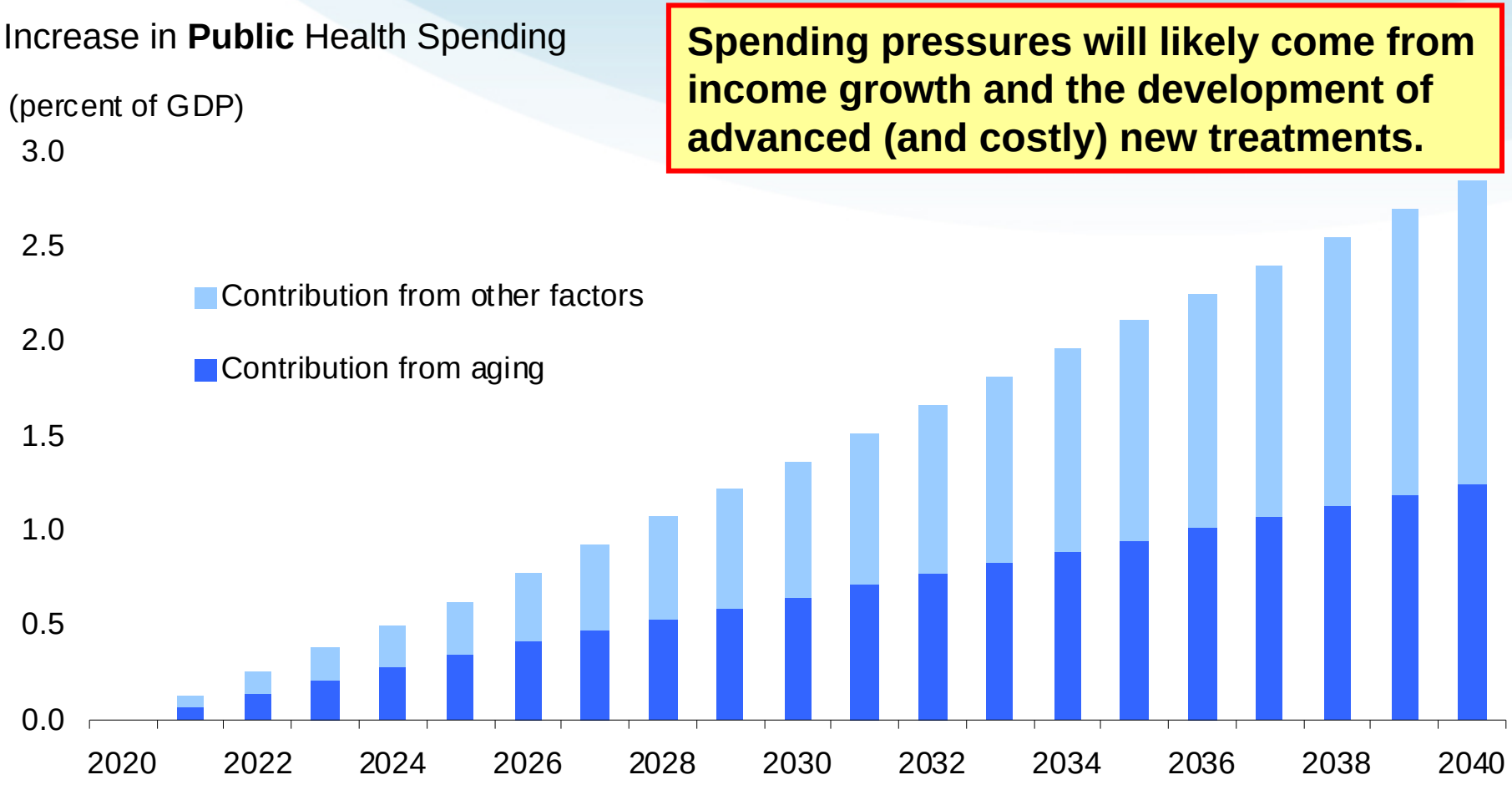
(thousands of dollars)



Source: CIHI.

… but "other factors" (than aging) will also contribute to rising health-care costs.

Spending pressures will likely come from income growth and the development of advanced (and costly) new treatments.



Source: OECD cost pressure scenario and author's calculations.

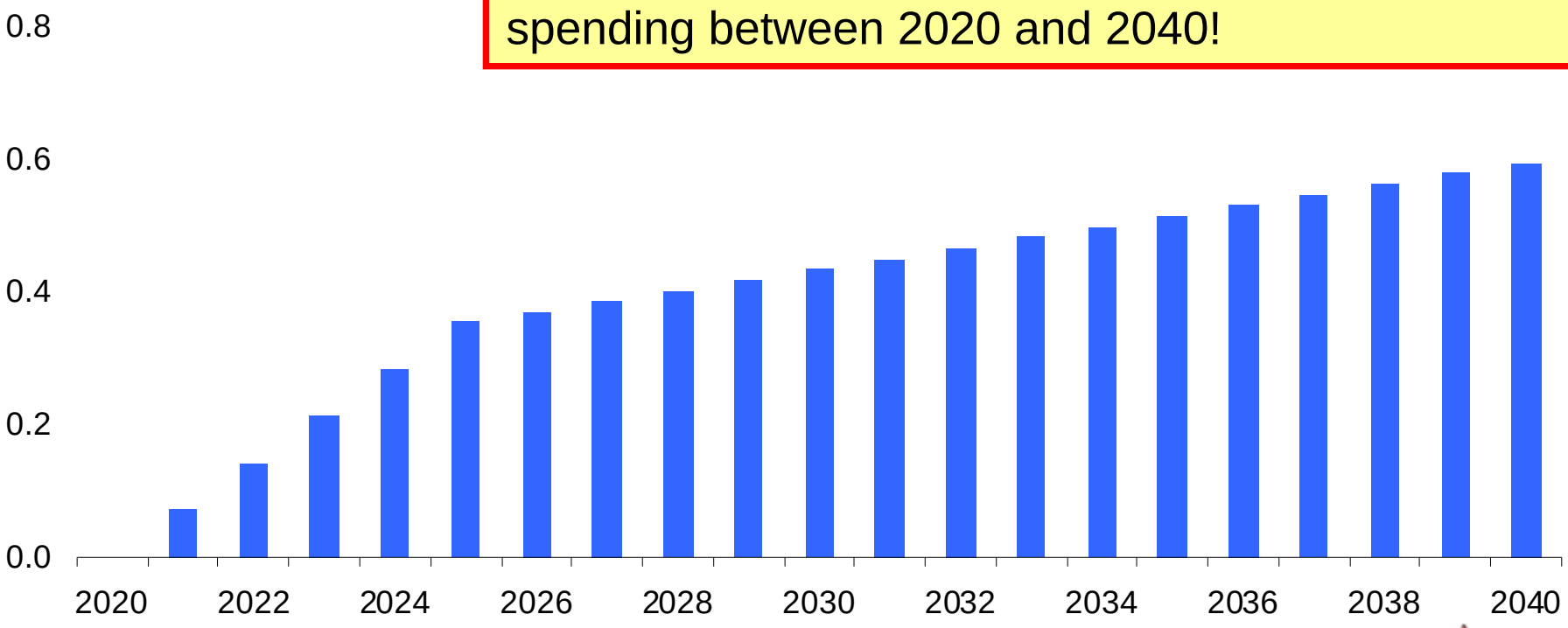
FYI: Total spending on health care increased from 5.4 to 7.5 percent of GDP between 1975 and 2008.

Rising elderly benefits will also put upward pressure on government spending as the population ages.

Increase in Elderly Benefits

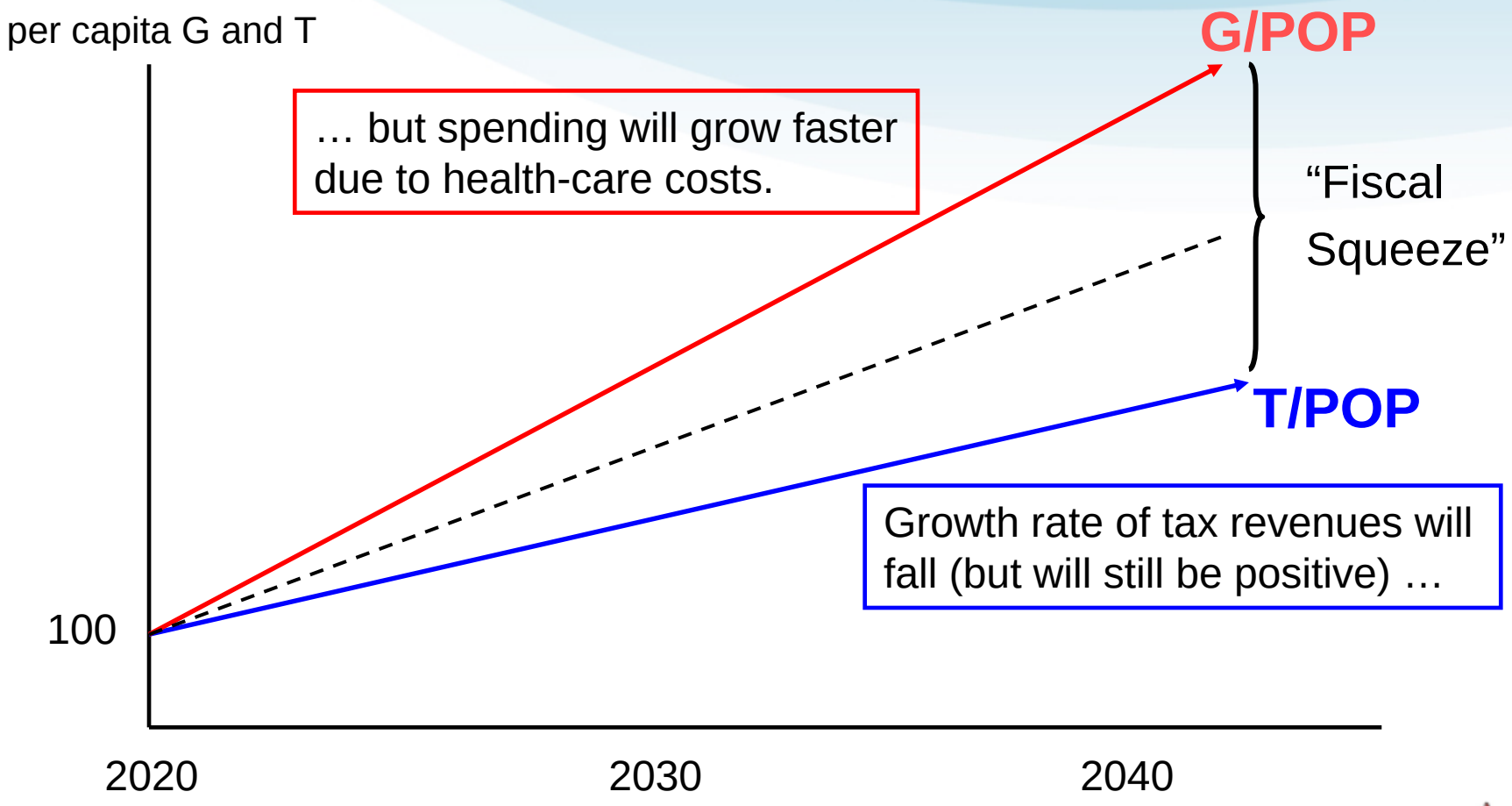
(percent of GDP)

Taken together, health and elderly benefits will add roughly 3.5 percentage points of GDP to public spending between 2020 and 2040!



Source: Chief Actuary (scenario: benefits rates indexed at inflation plus 60% of the assumed real wage growth) and author's calculations.

We can view the fiscal squeeze in terms of the growing divergence between per capita spending and tax revenues



Hold this constant

G/POP = (G/GDP) x (GDP/POP)

T/POP = (T/GDP) x (GDP/POP)

What (non fiscal) polices are available to Canadian governments to deal with this challenge?

1. Increase immigration rate?

2. Increase fertility rate?

3. Increase labour-force participation rate?

4. Restrain the growth of health-care spending?

5. Increase the productivity growth rate?
   (more on this later)

What broad fiscal choices are available?

1. Restrain non-age-related spending

2. Increase tax rates (or the “tax burden”)

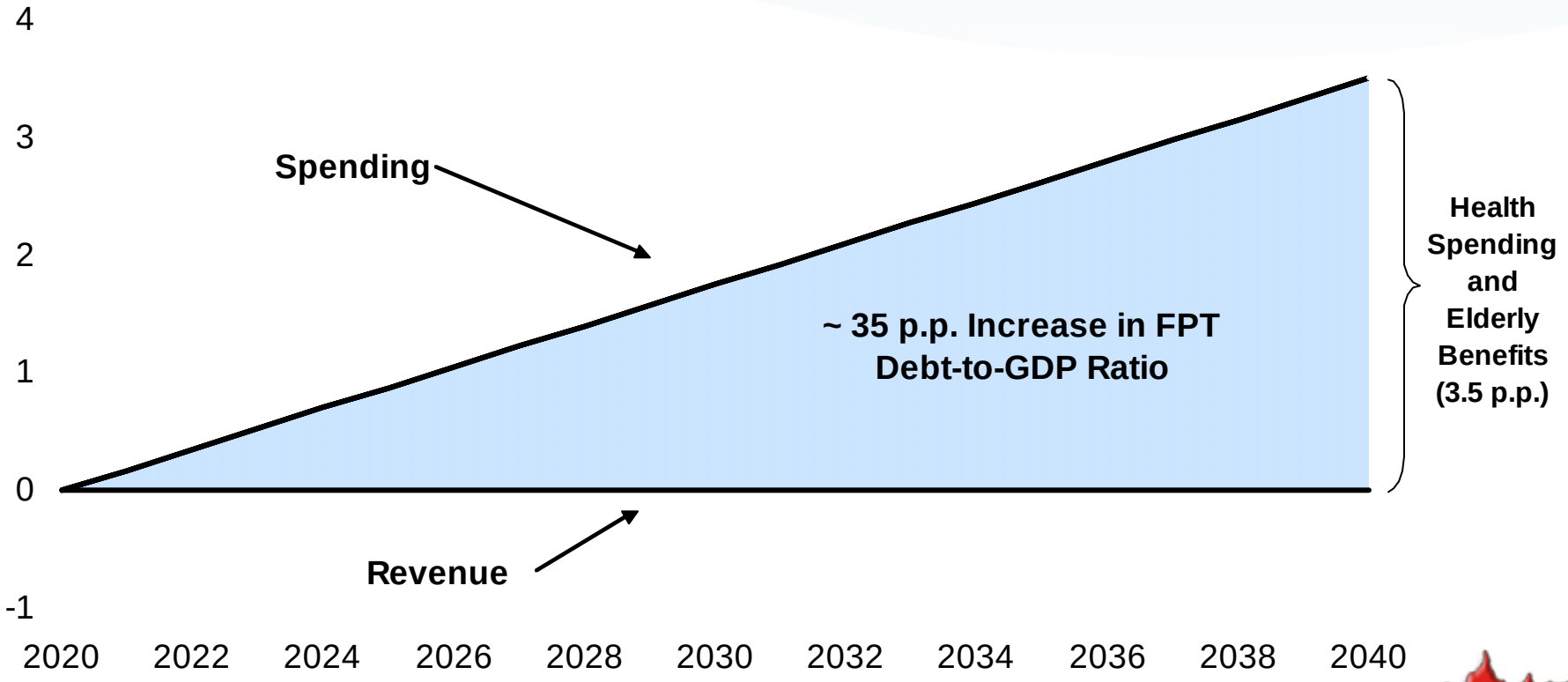
3. Defer the problem

   ➔ increase borrowing (debt)

Can these costs be absorbed purely through debt?

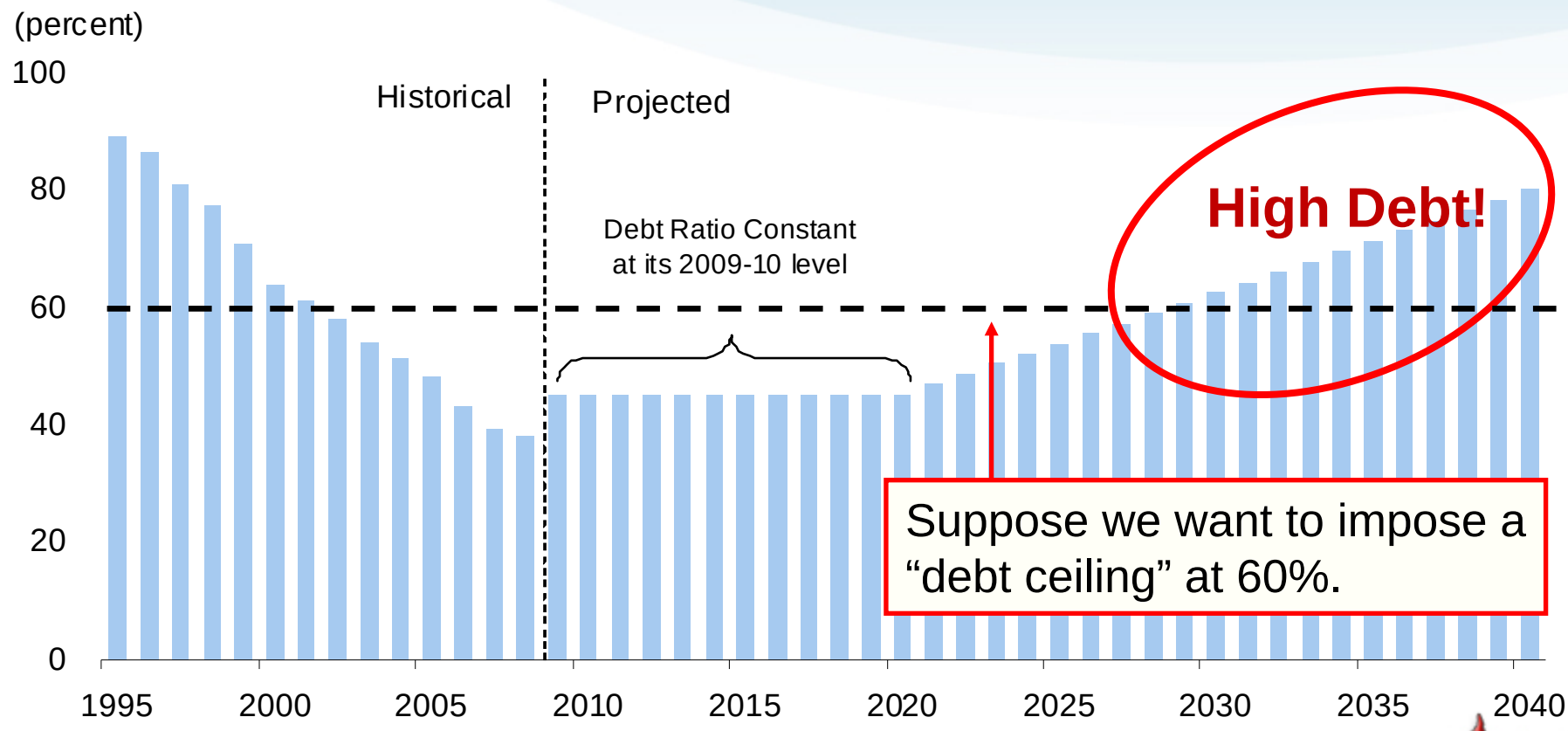
Spending and Revenue Paths From 2020 to 2040

(percentage points of GDP)



Source: OECD, CIHI, and author's calculations.

For Canadian governments, this would mean a return to the high-debt situation of the mid 1990s.



Source: Author's calculations.

Many alternatives to stay under this "debt ceiling":

#1. "Front-loaded" debt-reduction strategy:

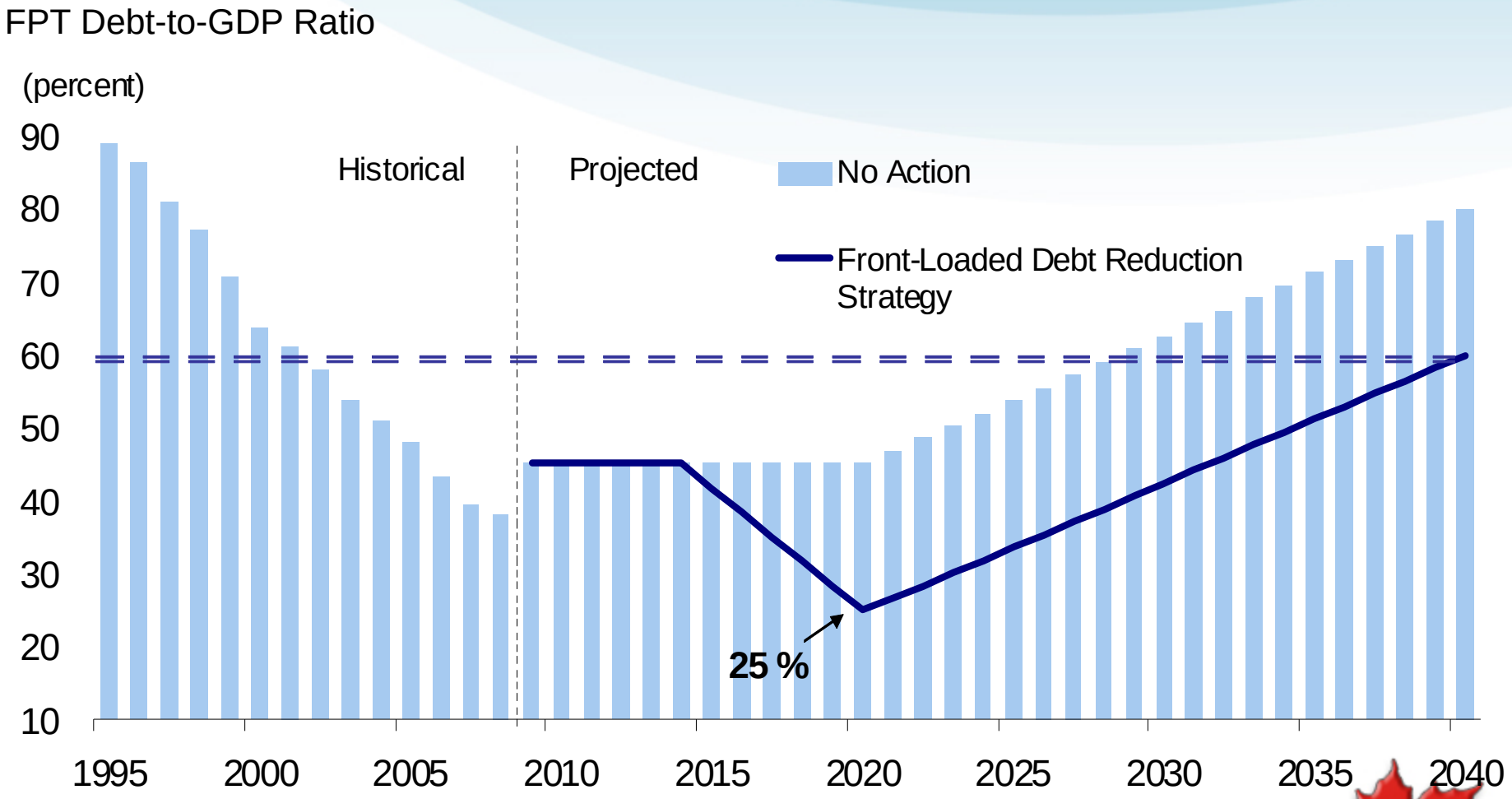
➔ Further reducing debt before the full impacts of aging materialize

#2. "Back-loaded" fiscal-adjustment strategy:

➔ Restrain non-age-related spending and/or increase taxes as the impacts of aging materialize

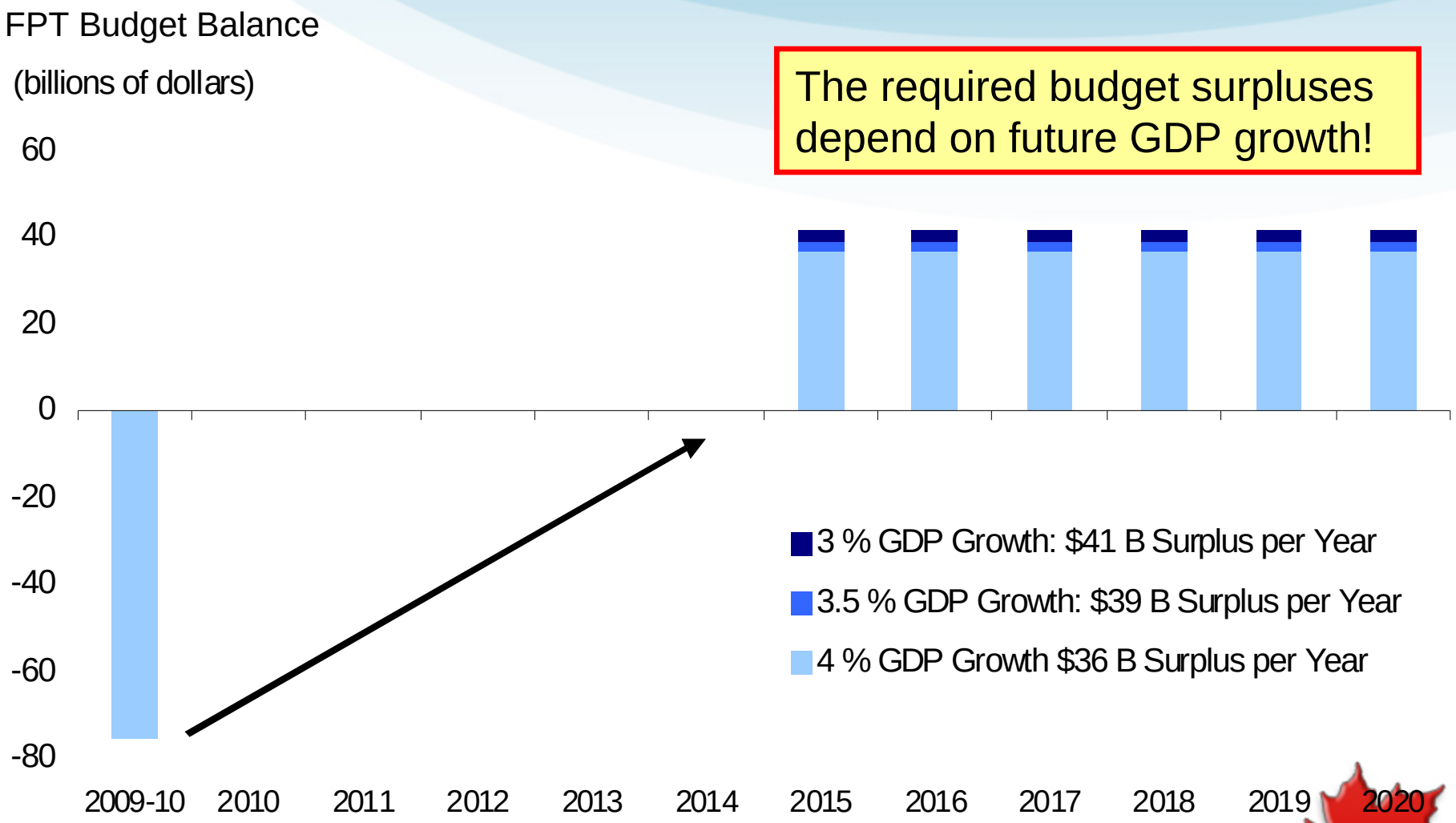
#3. Many others …

#1: Front-Loaded Debt-Reduction Strategy



Source: Author's calculations.

But this requires considerable fiscal discipline over the next decade by all levels of government.



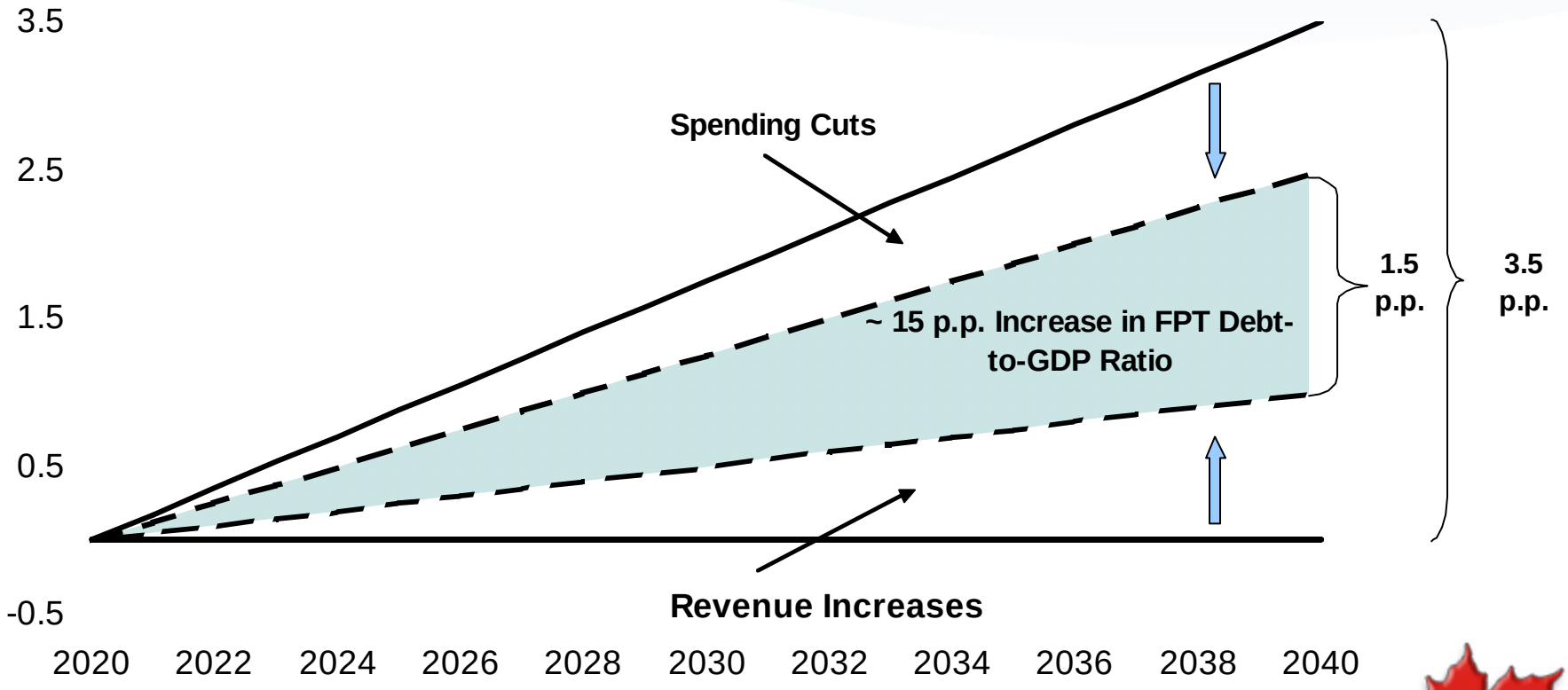
Source: September Update of Economic and Fiscal Projections, provincial-territorial Public Accounts and author's calculations.

#2: Back-Loaded Fiscal-Adjustment Strategy

Fiscal Adjustments between 2020 and 2040

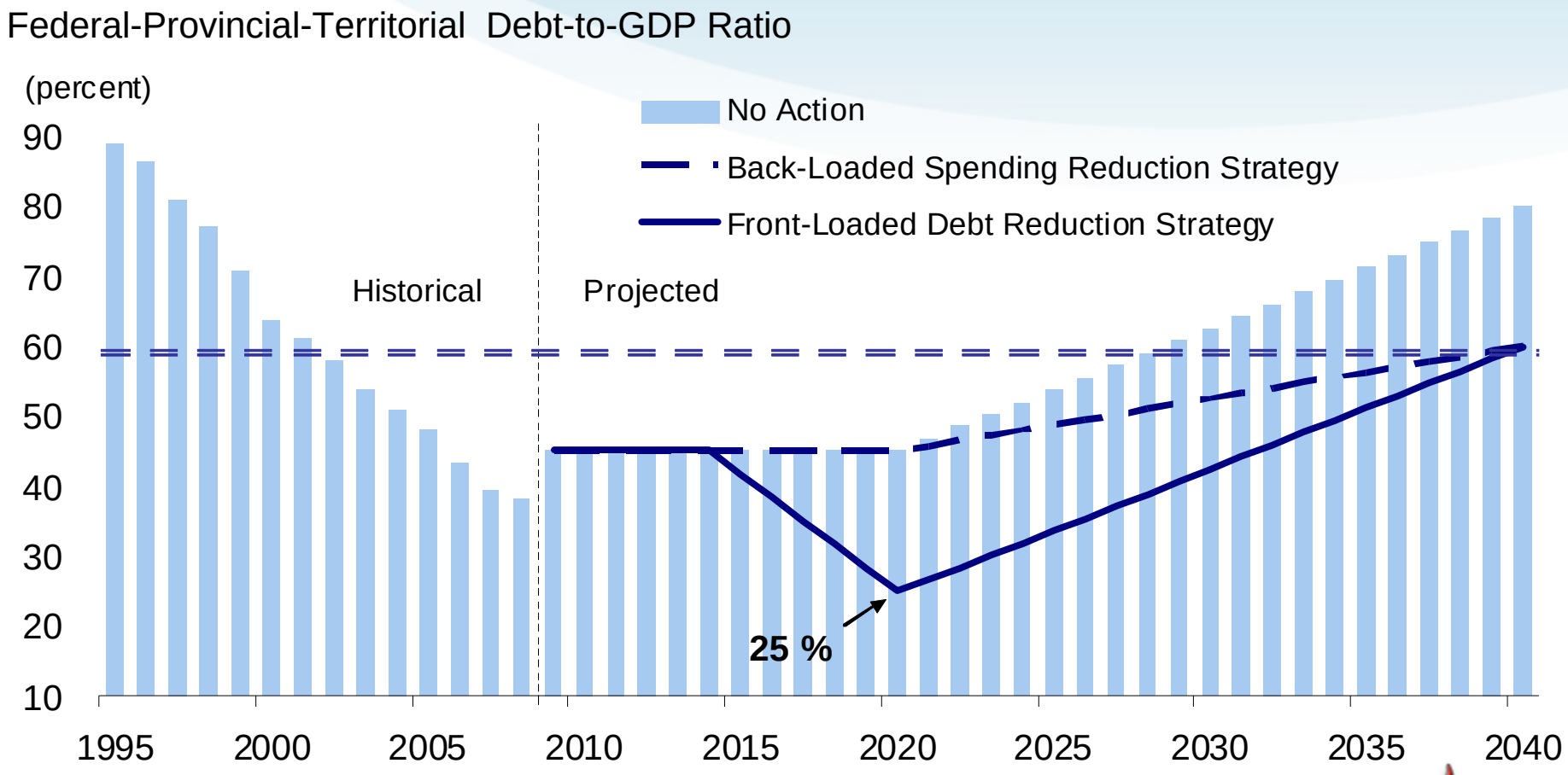
(percentage points of GDP)

As shown, the policy mix is 29% on G, 29% on T, and 43% on debt.



Source: Author's calculations.

This alternative also honours the “debt ceiling”, but does not avoid the need to make difficult decisions.



Which decisions? Tax burden increases by 1 pp of GDP and total spending falls by 1 pp of GDP between 2020 and 2040.

A Key Difference?

1. Both approaches honour the “debt ceiling” and both involve making difficult decisions.

2. But they have very different implications for intergenerational equity.

3. Who “should” pay for the baby-boom generation’s old-age health care?

A Few Thorny Issues

1. Aren't we getting steadily richer?

2. Would higher productivity growth help?

3. A Federal-Provincial Dimension?

#1: Won't our growing income provide the resources necessary to finance these health-care costs?

1. I have already assumed a baseline rate of productivity growth (1.3% p.a.).

2. So, it is true that real living standards are rising throughout the projection period.

3. But I have also assumed a constant tax burden (in option #1) or a rising tax burden (option #2), so these rising incomes are already built into tax revenues.

4. So the size of the challenge is not overstated.

#2: Can a higher productivity growth rate help ease the fiscal squeeze?

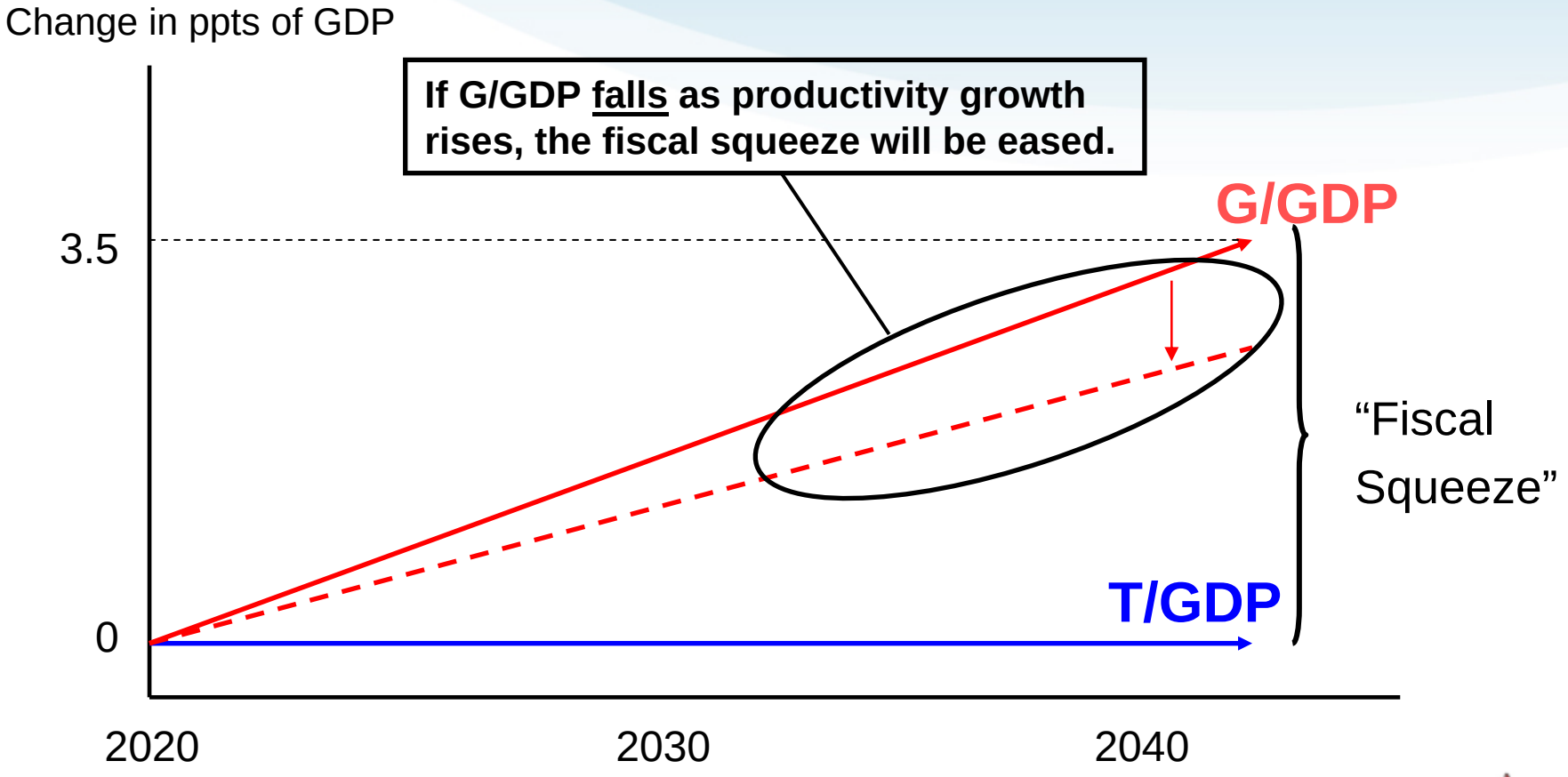
1. Yes -- subject to some important caveats:

2. How will increases in GDP translate into greater demand for health-care (and other) spending?

   Is the income elasticity for health care > 1?

3. Will governments be able to restrain the spending pressures created by income growth?

Impact of higher productivity growth on revenues and spending as shares of GDP



Crucial question: As GDP rises more quickly, which elements of public spending will be unaffected, so that G/GDP falls?

Some possible effects of higher productivity growth on the fiscal squeeze:

Additional productivity growth rate required to keep the debt ratio below the 60% ceiling (with no change in the tax burden)

If age-related spending is unaffected by higher productivity growth:	**~ 0.4 percentage points**
If all public spending is unaffected by higher productivity growth:	**~ 0.2 percentage points**

Recall that baseline productivity growth is assumed to be 1.3 % per year.

#3: The Federal-Provincial Dimension

1. Provision of direct health-care services is a provincial jurisdiction.

2. The federal government plays an important role, especially through federal transfers and its responsibility for providing health-care services to special groups.

3. How will the coming fiscal squeeze be shared between the two levels of government?

Summary and Final Thoughts

1. The coming demographic forces will lead to much higher spending on “age-related” items.

2. We must adjust to this increase in spending – but how?

3. Regard to intergenerational equity suggests reducing the debt ratio well ahead of 2020.

4. But this means a fairly rapid return to a balanced budget, followed by substantial budget surpluses.

5. How do we maintain public support for such surpluses?

Summary and Final Thoughts

6. Apart from debt reduction, there are several actions that governments can take:

7. Restraining spending and/or increasing taxes in the future is another approach.

8. Policies aimed at increasing the LF participation rate can play a role (eg., immigration, retirement, etc..).

9. Faster productivity growth will:

    1. **<u>certainly</u> be good for living standards**

    2. **<u>probably</u> help to ease the fiscal squeeze**

Questions?