MPA 887: Reforming Public Services Syllabus (2024 Summer)

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Grading Scheme A

30%	Project outline, due Day 2 10 p.m. 1000 word limit
50%	Project on a policy-related issue of your choice. An in-depth assessment of the issue with recommendations for policy changes to deliver better outcomes. Recommendations should reflect lessons from previous policy failures. All policy domains and all jurisdictions are eligible. Due Date (tbd). 3000 word limit.
10%	Class participation including class discussion.
10%	Presentation on policy-related issue. Students will be assigned roles for presentations, such as Opposition Critic.

Grading Scheme B

40%	Analysis of a public policy issue. Your analysis should cover nature of the problem; why it has persisted despite policy efforts; what should be done differently to achieve more favourable outcomes. Due Day 3 10:00 p.m. 1000 word limit.
40%	Analysis of a second public policy issue. Your analysis should cover nature of the problem; why it has persisted despite policy efforts; what should be done differently to achieve more favourable outcomes. Due Day 5 plus (tbd) 10 p.m. 1000 word limit.
10%	Class participation including class discussion.
10%	Presentation on policy-related issue. Students will be assigned roles for presentations, such as Opposition Critic.

You must select your grading scheme by end of Day 1.

Late submissions: 5% will be deducted each day your outline or project is late to a maximum of 2 days and then assignments will not be accepted except in cases of documented, as appropriate, emergency.

Participation: Your participation grade will be based on evidence of your preparation, your contributions to small group and plenary discussions in class, and your general participation when not presenting. Grading criteria include work quality, relevance of questions and comments, ability to formulate evidence-based arguments, willingness to challenge accepted ideas, concern for views expressed by others, solicitation of peer ideas and ability to respond constructively to challenges and criticism. The quality, not quantity, of your participation is important so be sure to listen to and engage your peers.

Learning Outcomes: There have been persistent failures of public policy to achieve desirable socio-economic outcomes which provide valuable lessons across **all** realms of public policy and public administration. Examples are numerous but include:

- Governments struggle to craft policies that will raise long-term growth rates.
- They typically run fiscal policy in a pro-cyclical fashion and have a bias toward deficits and debt accumulation.
- After 30 years of low, steady inflation, prices have again taken off.
- Income distribution is unequal.
- Public opinion is focused on crises in access to primary healthcare and affordable housing.
- Greenhouse gas emissions targets are rarely achieved.
- Continued unpreparedness for the predictable public policy issue of our ageing population.
- There is an intergenerational wealth transfer away from the young.

We will examine the common themes behind these and other policy failures. Our policy scope will be international, including Canada at the federal, provincial, territorial and municipal policy levels.

Reflecting the strong oral tradition of public policy, class discussion, debate and student presentations will be encouraged and highly valued. Working "within the box" has led to policy failures. This is the time to "swing for the fences" with fresh ideas on how to improve the well-being of people.

Although MPA 887 will involve the application of principles in both macro- and micro-economics, no further background than that provided by MPA 804/805 will be required or necessary for your success.

Background reading and progression:

Background modules will be provided for each subject area covered and will include references to relevant literature. These references should **not**, however, be considered a formal reading list as the richness of our class debate would be impinged if everyone forms their views from the same reference material. As with all public policy matters, your positionality is relevant, and your knowledge and independent research are crucial for your success.

- Approximately one month before the course begins the modules will be loaded to OnQ for each policy subject area.
- Our tentative class schedule is set out below, and the course will be adapted based on student interests and current events.
- Lectures and class discussion will occur each morning.
- Student presentations will occur on the afternoons of Days 4 and 5.

Tentative Class Schedule

Day 1 Introduction, State of the Nation:

> Course outline. Survey of interest amongst our classroom community. Framework(s) for policy analysis. Examples of strategic application of the classic policy tools of allocation, distribution and stabilization and their integration with moral suasion, regulation, taxation and/or public spending.
>
> "State of the Nation" for Canada. An assessment of life in Canada from certain perspectives including happiness, economic, equality/diversity, social/individual, and environmental

considerations. Our assessment will be calibrated against our ideals, our historical record and the achievements in other countries.

We will examine why some countries achieve better outcomes while others struggle persistently.

Day 2 Health Policy; Macroeconomics:

Health Policy. We will examine the juxtaposition of Canadians' generally favorable view of their health system against the evidence, our focus on healthcare rather than the promotion of health, and our ongoing unpreparedness for population ageing. We will consider the interactions across policy areas and the weight, but disregard, of socio-economic factors in health outcomes.

Macroeconomic policy and global issues. Within your lifetime, the belief that economies would no longer suffer from wild economic swings persisted until the 2008 financial crisis and ensuing recession. Prices have soared of late following 30 years of low, steady inflation. We will consider the potential for bias in policy-implementation towards fiscal deficit, debt, and intergenerational transfers. We will also examine the perpetual deficits in other countries that continue to persist despite checks and balances.

Day 3 Education; Social Policy; and Economic Policy.

Education. We will examine why Canadian post-secondary institutions face ongoing, if not mounting, financial challenges despite their successful record of generating high private and social rates of return. We will look at factors driving academic results in international standard exams of children.

Social. Poverty has been reduced for seniors and children, but the income distribution remains very unequal. Poverty is persistent for certain groups. We will consider the potential role for proposals such as basic income.

Economic. We will probe why audits typically show economic interventions have not generated favourable net economic benefits. We will examine the slow, unsteady transition to "clean growth" in concert with economic development, innovation, business support and labour market factors.

Day 4 Environment & Indigenous Policy.

Environmental Policy. Contemporary environmental policy challenges including climate change, traffic congestion, water use, and waste disposal will help us illustrate policy failures and opportunities, especially as informed by the work of the EcoFiscal Commission and Climate Change Canada.

Indigenous Policy. Socio-economic gaps persist for Indigenous communities, and this will be used as a platform to analyze current efforts to establish a government-to-government relationship with our Indigenous Peoples, including a new fiscal relationship.

Day 5 Common Themes:

We will critically examine why government programs tend to be infrequently subject to review, and the persistent knowledge gap regarding government intervention via the regulatory arm.

The prominent trend away from public to private services will be discussed, as well as the implications for policy and the public.

The changing environment for public policy and the implications for policy reform and the civil service. The shift toward private services, the rise of social media, the partiality of remaining news services will be among the recent developments addressed.

The course will close on the strategic lessons from past policy failures and the upcoming policy opportunities for **you**, as a current or future policy authority, which **offer better outcomes**.

Academic Integrity

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Summer 2024

School of Policy Studies

Queen's University

Don Drummond

CLASS ONE

ROLE OF GOVERNMENT AND PUBLIC POLICY

In Nature and Causes of the Wealth of Nations, 1776, **Adam Smith** described the roles of government as:

- National defence
- Administration of justice (law and order)
- Provision of certain goods (transportation infrastructure, education…)

This introduces the notion of "**public good**"

Which in turn introduces the notions of "**market failure**" and "**externalities**"

Public Good

- A product that is non-excludable and nondepletable (or "non-rivalrous")
- Socially beneficial (there are also **public bads** such as polluted air) but are almost never produced (or at least not efficiently) by free markets
- Nonexcluable – one cannot exclude individuals from enjoying the benefits; or in inverse, one cannot exclude one from benefitting even if not paying
- Nondepletable – an individual's use of the good does not diminish its availability to others
- Example**: national defence –** hard to protect just some of the residents while excluding others
- Market would typically undersupply public goods (or oversupplies public bads) because the markets does not incorporate the "externalities"

Private Good

- Excludable and depletable – one's consumption deprives others and possible to exclude some from consumption

Market Failure

- Inefficient distribution of goods and services
- Individual incentives for rational behaviour do not lead to rational outcomes for the group
- Individual decisions may be optional for the individual but not for the group

Externalities

- **Positive externalities –** benefits cannot properly be charged to individuals
- Examples: national defence, research & development, training, education (private and public rates of return)
- **Negative externalities –** costs cannot properly be charged to individuals
- Examples: pollution (price is determined by intersection of private demand and supply with the latter based on marginal private cost which is less than marginal social cost – due to externalities)

Purposes of Public Finance – The Theory of Public Finance, Richard Musgrave, 1959

1. **Allocation**
- Provision of public or social goods
2. **Distribution**
- government intervention to adjust the distribution of income and wealth in compliance with what society considers "fair" or "just"
3. **Stabilization**
- Mitigation of economic swings which could generate high unemployment and poverty
- Could be extended to strive for achievement and maintenance of high employment and an acceptable rate of economic growth
- Generally thought to require a reasonable degree of price level stability

Competing Visions of Public Finance – Public Finance and Public Choice: Two Contrasting Visions of the State, James M. Buchan and Richard A. Musgrave, 1999.

Musgrave's vision saw an activist role for government policy. Raise economic growth. Improve income distribution. Address pollution. Et cetera.

Buchanan was skeptical of government intervention. He thought government interventions are unduly driven and shaped by interest groups and coalitions that promote their own interests. He saw in this a bias toward excessive government intervention. In turn that led to excessive levels of taxation. Urges constitutional restraints against government expansion.

Musgrave focuses on what "good" government can do. Buchanan more concerned with the "bad" it can do.

Philosophical difference can be brought down to level of individual programs. For example, Musgrave supports a progressive income tax; Buchanan a flat tax.

If nothing else, the debate forces recognition of testing whether government intervention is "succeeding" and the costs of intervention.

Issues for Discussion

- **Is there a clear line between public and private goods?**

Consider a road. Conventionally thought of as a public good because of "free riders". But tolls can be levied (with public authority!). And tolls can be used as a private source of funds.

Many health diagnostics are done in the private sector. Often paid for by a public health card.

- **What sort of income distribution does a society consider "fair" or "just"?**

How much intervention will society support to alter the distribution that comes from the "market" distribution of endowments?

Should the focus be on taking from the well off to give to the poorer? Or concentrate on lifting the poorer? What are the costs of distribution policies?

- **What is the "right" division between public and private sectors**?

Or can they be brought together more (such as public-private partnerships)?

TOOLS OF PUBLIC POLICY INTERVENTION

Moral suasion

- An appeal to **morality** to influence or change behaviour

Taxation

- A means of raising revenue to finance government intervention, but can also provide incentives to do certain things and/or not do certain things

Government spending

- Can provide incentives to encourage or discourage certain activities

Regulation

- Use of the state's "coercive power" to control the behaviour of individuals and/or firms

Example: Smoking in Canada

In 1965 about ½ of Canadians 15plus smoked

In 2022, 12 percent of Canadians 15plus smoked

Class Exercise: How and why did smoking decline? What was the role of public policy? What policy tools were used?

Moral Suasion – describe

Taxation – describe

Government spending – describe

Regulation – describe

What about vaping?

In 2022,

6% of Canadians aged 15 and older had reported vaping in the past 30 days. Younger Canadians were more likely to have vaped in the past 30 days (14% of youth aged 15 – 19 and 20% of those aged 20 – 24) compared to 4% of Canadians aged 25 and older.

Following relative success on tobacco smoking, did regulations go to asleep?

Break-out Exercise

Pick any problem you wish. Describe how you would address it through moral suasion, taxation, government spending and regulation.

Take 30 minutes as a group. Then report back to the class.

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Class 2

"State of the Nation" for Canada

"If you don't know where you are going, you'll end up someplace else" Yogi Berra.

Speaks to the importance of defining objectives for public policy.

At the broadest level, what kind of society do we want in Canada?

We need to define that, measure how we are doing against the objectives, and then assign policy to get there (and not "someplace else")

General Picture that emerges about Canada and Canadians:

- Good place to live; does well on most indices but not near the top of international rankings on many
- Decent but not world-beating income/consumption
- Reasonably happy
- Unequal income distribution
- Relatively high poverty concentrated in certain groups
- "middle-of-the-road" health despite high expenditure
- Major polluters
- Significant gap between male and female earnings

Different approaches advocated by different groups:

- Do more re-distribution (take more from the rich to give to the poor)
- Grow incomes of the poor

An obstacle for policy development: short pay-off cycles dictated by short political cycles

"State of the Nation" will consider:

1. Simple, Traditional View – Lots of Money (GDP)
2. Happiness
3. Indexes of Well-Being
    - Canadian and international indices of well-being
    - Income distribution in international context

- Low income and poverty in Canada
- Canada's one percenters
- Is the middle class shrinking/suffering in Canada
- Health of Canadians is middle-of-the-road
- Canada has high greenhouse gas emissions per capita
- Significant gap in male/female earnings

4. The Great Gatsby Curve

1. Simple, Traditional View – Lots of Money (GDP)

Per Capita Nominal GDP 2023 US$ (Source: IMF)

1.	Luxembourg	135,605
2.	Ireland	112,248
3.	Switzerland	102,866
4.	Norway	99,266
5.	Singapore	87,884
6.	Qatar	81,968
7.	United States	80,412
8.	Iceland	78,837
9.	Denmark	71,402
10.	Australia	63,487
11.	Netherlands	61,798
12.	San Marino	58,541
13.	Austria	58,013
14.	Sweden	55,216
15.	Finland	54,507
16.	Macau SAR	54,296
17.	Belgium	53,657
18.	**CANADA**	53,247
19.	Israel	53,196
20.	Germany	52,823
21.	Hong Kong SAR	51,168
22.	United Kingdom	48,913
23.	New Zealand	48,071
	Japan	33,950

Not bad but not great for Canada to be 18th place. Note the 34 per cent gap with the United States ($27,165 per person).

See Andrew Coyne in the G&M

I suspect you would find most Canadians still think of us as one of the richest countries on Earth: maybe fifth or sixth. And at one time we were. As late as 1981, Canada ranked sixth among OECD countries in GDP per capita, behind only Switzerland, Luxembourg, Norway, the United States and Denmark.

But we're not any more. As of 2022 we were 15th. Over the 40-odd years in between, Canada's per capita GDP grew more slowly than that of 22 other OECD members. Countries that used to be poorer than us – Ireland, the Netherlands, Austria, Sweden, Iceland, Australia, Germany, Belgium, Finland – are now richer than we are.

https://www.theglobeandmail.com/opinion/article-canada-is-no-longer-one-of-the-richest-nations-on-earth-country-after/

BUT

Is GDP (income) too narrow a perspective for a nation:

- Does money buy happiness?
- Is the country's money evenly distributed or does a lot reside in the hands of a few?
- Is the production/income generated by depleting resources
- Is the production/income generated by causing environmental damage
- GDP counts things like protection against crime which are defensive, replacement of destroyed infrastructure (not a net gain)
- GDP does not speak directly to well-being

2. Happiness

Subjective, but is that a problem? Should politicians and policy makers not heed self-assessments of well-being?

How might one explain happiness?

Six things science tells us about happiness (John Helliwell)

- Money supports life satisfaction at low income levels and the effect diminishes as income rises
- Social interactions have a greater impact than money
- Trust is a must
- Longing to belong
- Generosity pays off
- Freedom brings happiness (look at mapping of job satisfaction with perception of discretion)
- Reach out (to other people)

Factors Used to Explain Happiness in The World Happiness Report https://happiness-report.s3.amazonaws.com/2020/WHR20.pdf

1. **GDP per capita** is in terms of Purchasing Power Parity (PPP) adjusted to constant 2011 international dollars, taken from the World Development Indicators (WDI) released by the World Bank on November 28, 2019. See Statistical Appendix 1 for more details. GDP data for 2019 are not yet available, so we extend the GDP time series from 2018 to 2019 using country-specific forecasts of real GDP growth from the OECD Economic Outlook No. 106 (Edition November 2019) and the World Bank's Global Economic Prospects (Last Updated: 06/04/2019), after adjustment for population growth. The equation uses the natural log of GDP per capita, as this form fits the data significantly better than GDP per capita.
2. The time series of **healthy life expectancy at birth** are constructed based on data from the World Health Organization (WHO) Global Health Observatory data repository, with data available for 2005, 2010, 2015, and 2016. To match this report's sample period, interpolation and extrapolation are used. See Statistical Appendix 1 for more details.
3. **Social support** is the national average of the binary responses (0=no, 1=yes) to the Gallup World Poll (GWP) question, "If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?"
4. **Freedom to make life choices** is the national average of binary responses to the GWP question, "Are you satisfied or dissatisfied with your freedom to choose what you do with your life?"
5. **Generosity** is the residual of regressing the national average of GWP responses to the question, "Have you donated money to a charity in the past month?" on GDP per capita.
6. **Perceptions of corruption** are the average of binary answers to two GWP questions: "Is corruption widespread throughout the government or not?" and "Is corruption widespread within businesses or not?" Where data for government corruption are missing, the perception of business corruption is used as the overall corruption-perception measure
7. **Positive affect** is defined as the average of previous-day affect measures for happiness, laughter, and enjoyment for GWP waves 3-7 (years 2008 to 2012, and some in 2013). It is defined as the average of laughter and enjoyment for other waves where the happiness question was not asked. The general form for the affect questions is: Did you experience the following feelings during a lot of the day yesterday? See Statistical Appendix 1 for more details.
8. **Negative affect** is defined as the average of previous-day affect measures for worry, sadness, and anger in all years.

World Happiness Rankings

1. Finland (7.74)

2. Denmark (7.58)

3. Iceland (7.54)

4. Sweden (7.34)

5. Israel (7.34)

6. Netherlands (7.32)

7. Norway (7.30)

8. Luxembourg (7.12)

9. Switzerland (7.06)

10. Australia (7.06)

11. New Zealand (7.03)

12. Costa Rica (6.96)

13. Kuwait (6.95)

14. Austria (6.91)

15. **CANADA (6.90)**

23 United States (6.73)

In 15th place, Canada's ranking isn't bad but isn't great. Note the relatively high rankings of the Northern European countries. Suggests we should compare Canada to them more than we (incessantly) compare to the United States. (8 positions below Canada in 23rd place).

The happiest in Canada: residents of rural locations that have a strong employment base

The unhappiest in Canada: residents of urban centres with large numbers of immigrants

Can money buy happiness? Its complicated.

Numerous studies show it is a non-linear relationship.

As income increases after a certain point, its impact on happiness tends to reduce. And those with little money felt happier with increased income. Even after basic needs have been covered, an increase in income still improved life satisfaction.

To a degree, the wealthy use their money to make themselves less happy as aspects of their use of money brings social isolation (large houses on large lots, retreat to isolated vacation property, less likely to join community and church groups et cetera).

Take-away: Income is important for happiness but there is much more to it.

https://happiness-report.s3.amazonaws.com/2020/WHR20.pdf

3. **Indexes of Well-Being**

Less subjective than "happiness" but a broader perspective than Gross Domestic Product (income)

"What to leave in, what to leave out", Bob Seeger, "Against the Wind".

AND how to weight what is in (and that is highly subjective).

Consider the Index of Well-Being from the Centre for the Study of Living.

Alexandria Stephens, Andrew Sharpe and Lars Osberg
Centre for the Study of Living Standards

New Estimates of the Index of Economic Well-Being for Canada 1981-2017

The economic well-being of Canadians has been shrinking since 2008

Keywords: economy, well-being, economic security, national wealth, consumption, GDP

IN BRIEF

Our update of the Index of Economic Well-being, a broader measure of economic progress than gross domestic product, shows the well-being of Canadians fell between 2008 and 2017. The main drivers were decreases in economic security and national wealth. Since the end of the commodity boom, the social costs of greenhouse gas emissions have risen while the market value of natural resources fell, dragging down national wealth. Economic security, which includes security against unemployment, illness and poverty, is in long-term decline. Improved economic equality and higher spending by households and governments have not been enough to offset the declines in security and wealth. Over the longer period, 1981-2017, the index grew 0.49% a year, considerably slower than the 1.26% annual growth of GDP per capita.

Trends in the Index of Economic Well-being and GDP per capita, 1981-2017 (1981=100)

file:///C:/Users/dondr/Downloads/Index%20Update%20CLEAN%20with%20AD.pdf

a)	Consumption Flow	Per capita market consumption
		Life expectancy
		Unpaid work per capita
		Government spending per capita
		Less: Regrettable expenditure per capita
b)	Wealth Stocks	Capital stock per capita
		R&D per capita
		Natural resources per capita
		Human capital per capita
		Net international investment position per capita
		Less: Social cost of environmental degradation
c)	Equality	Income Inequality

Poverty rate and gap (poverty intensity)

d) Economic Security — Financial risk from illness
Risk from single-parent poverty
Risk from poverty in old age

Regrettables: These include the costs of commuting, which includes both time and travel costs; the costs of crime, such as security measures, repairing damaged property, and medical and legal expenses; the costs of household pollution abatement, including devices to improve air and water quality; and the costs of automobile accidents, such as medical, legal, and repair costs.

The social cost of greenhouse gas emissions. We present estimates based on three alternative values of the marginal social cost of carbon: a low estimate of $51.25 per tonne ($41 US), a midrange or base case of $125 ($ 100 US) and high estimate of $250 ($200 US) in 2016 Canadian dollars. In 2017, when the lowest social cost of carbon price of $51.25 per tonne is used, greenhouse gas emissions had a cumulative per capita cost since 1981 of $13,600. If the cost of carbon is assumed to be $125 per tonne, the cumulative cost is $41,200, and if it $250 per tonne, the cumulative per capita cost is $140,000. Between 1981 and 2017, the cumulative per capita cost of greenhouse gas emissions increased 9.9% a year.

The value of unpaid work per capita in Canada has increased by nearly two-thirds to $13,618 in 2017 from $8,257 in 1981. (Table 3) This includes domestic work, such as meal preparation and cleaning, help and care of children and adults, management and shopping, transportation and travel, and volunteer work. It peaked at $15,768 in 2010, (Chart 8) and since then has been shrinking.

To understand why **income distribution** matters, think of a society where the average income is $10,000. That could mean everyone receives $10,000. Or it could mean that the top 1% receive $901,000 while the other 99% all got $1,000. Total utility would be higher in the more equal scenario. Because money matters most to those who have the least of it, increasing inequality which arises from greater deprivation of the poor is particularly bad for national well-being.

Equality worsened over the period, falling 0.07 points to a value of 0.548 in 2017 from 0.621 in 1981. The decline was driven by sharp increases in both poverty intensity and in inequality as measured by the GINI coefficient, (Charts 19 and 20). Over the entire period, there was an average annual decrease of 0.35%. However, this trend was entirely concentrated in the period before 2000. Poverty intensity increased substantially from 0.069 in 1981 to 0.076 in 2000, but stabilized at 0.077 in 2008 and 0.076 in 2014 before it fell again to 0.073 in 2017. The GINI coefficient increased from 0.285 in 1981 to 0.309 in 2000 but has remained essentially stable at roughly 0.31 after that.

Poverty intensity is the product of the **poverty rate** and the **average poverty gap**. Its stability can be explained by somewhat countervailing trends in the poverty rate and the poverty gap ratio. The poverty rate increased to 12.7% in 2017 from 12% in 1981. It peaked at 13.4% in the recession of 2008 and has fallen since then. Between 2000 and 2017 it edged down 0.1 percentage points. In contrast, the per-person poverty gap ratio in 2017 was the same as it was in 1981. The fluctuations in the data masked by this long-term stability have counteracted somewhat changes in the poverty rate. While the poverty gap rose from 1981 to 2000, (from 30.6% to 31.5%, or at 0.15% per year), it dropped from 2000 to 2008 (from 31.5% to 30.3% or 0.48% a year). It then increased after 2008 by 0.33% per year, whereas the poverty rate fell. Growth in the poverty gap did, however, follow growth in the poverty rate after 2014, falling at 0.33% annually. Despite increasing slightly from 2008 to 2017, the poverty gap ratio in Canada has decreased since 2000, falling 1.1 percentage points (0.17% per year) from a high of 31.5% in 2000.

The index of **economic security** has fallen. It is the only domain in our overall index to have consistently declined in all periods since we began our index. This decline, which measured -0.10% a year from 1981 to 2000, accelerated to -0.54% a year from 2000 to 2008. It remained constant since, measuring -0.53% from 2008 to 2017. Unfortunately, growth rates at the sub-period level are also not encouraging. Despite slowing slightly to -0.48% per year from 2008 to 2014, the decline in economic security accelerated to its sharpest rate of -0.63% in the following sub-period of 2014-2017. Overall, the index decreased 0.054 points or -0.31% annually from a 1981 value of 0.517 to a 2017 value of 0.463, and 0.025 points or 0.53% annually since 2000, when it was 0.507. There has been one success story – security from single-parent poverty. Otherwise, Canadians are less economically secure now than they were nearly three decades ago.

Single-parent poverty: Divorce rates are down, the poverty rate of single parents has fallen and the poverty gap among poor, single parents has shrunk

A significant portion, if not a majority, of this increased insecurity is due to increasing risk of the financial cost of illness, which has increased steadily since 1981 as **out-of-pocket medical expenses mounted**. In 2017, the index of security from financial risk from illness in Canada was only 0.192, compared to 0.499 in 1981, a 0.307-point drop that represents an average annual decline of -2.6%.

Unemployment (called employment) benefits coverage has dropped sharply over the period, falling from 71.2% in 1981 to 42.3% in 2017. It reached its lowest point of 38.4% in 2014.

In 2017 the index of **security from risk of old age-poverty** in Canada measured 0.599, representing an increase of 0.256 points, or 1.6% per year, from its 1981 value of 0.343. This growth was entirely driven by growth before 2000, when the index of security from old-age poverty peaked at 0.787. Since then, it has fallen -1.6% per year, an actual decrease of 0.188 points (no "real" increases to old age benefits since the early 1980s so seniors benefits have not shared in income gains other Canadians have reaped).

GDP per capita has risen almost 60 per cent since 1981 (average annual growth rate of 1.26 per cent).

The Index of Well-Being has risen only 20 per cent since 1981 (growth rate of .49 per cent). It has cycles around a constant level since the 2008 financial crisis.

Why has well-being done so less well than real output?

- Decreases in national wealth (weakness in commodity prices and social cost of rising greenhouse gas emissions)
- Decreases in economic security (security against unemployment, illness and poverty in long-term decline)

Income equality has improved of late. Spending by households and governments has risen. But these positives have not out-weighed the negatives.

The IEWB addresses levels and rates of change over time.

This does not give much of a context for the "acceptability" to society of the results.

In good part the answer is highly subjective (what kind of society do we want)?

International comparisons can provide a framework.

Take income. As shown above, Canadians have relatively high incomes but far from the lead in the world.

OECD's Better Life Index

http://www.oecdbetterlifeindex.org/countries/canada/

Canada performs well in many dimensions of well-being relative to other countries in the Better Life Index. Canada outperforms the average in income, jobs, education, health, environmental quality, social connections and life satisfaction. These assessments are based on available selected data.

Money, while it cannot buy happiness, is an important means to achieving higher living standards. In Canada, **the average household net-adjusted disposable income per capita is USD 34 421 a year**, more than the OECD average of USD 30 490 a year.

In terms of employment, **about 70% of people aged 15 to 64 in Canada have a paid job**, above the OECD employment average of 66%. Some 73% of men are in paid work, compared with 67% of women. **In Canada, 3% of employees work very long hours in paid work**, below the OECD average of 10%, with 5% of men working very long hours in paid work compared with 1% of women.

Good education and skills are important requisites for finding a job. In Canada, **92% of adults aged 25-64 have completed upper secondary education**, higher than the OECD average of 79%. However, completion varies between men and women, as 91% of men have successfully completed high school compared with 94% of women. In terms of the quality of the education system, **the average student scored 517 in reading literacy, maths and science in the OECD's Programme for International Student Assessment (PISA)**. This score is higher than the OECD average of 488. On average in Canada, **girls outperformed boys by 9 points**, above the average OECD gap of 5 points.

In terms of health, **life expectancy at birth in Canada is around 82 years**, one year higher than the OECD average of 81 years. Life expectancy for women is 84 years, compared with 80 for men. **The level of atmospheric PM2.5** – tiny air pollutant particles small enough to enter and cause damage to the lungs – **is 7.1 micrograms per cubic meter**, below the OECD average of 14 micrograms per cubic meter. In Canada, **90% of people say they are satisfied with the quality of their water**, higher than the OECD average of 84%.

Concerning the public sphere, there is a strong sense of community and moderate levels of civic participation in Canada, where **93% of people believe that they know someone they could rely on in time of need**, more than the OECD average of 91%. **Voter turnout,** a measure of citizens' participation in the political process, **was 68% during recent elections**, slightly lower than the OECD average of 69%. Social and economic status can affect voting rates; voter turnout for the top 20% of the population is an estimated 69% and for the bottom 20% it is an estimated 65%.

When asked to rate their general satisfaction with life on a scale from 0 to 10, Canadians gave it **a 7 grade on average, higher than the OECD average of 6.7.**

Government of Canada’s Index of Well-being

Mandated by Prime Minister’s Office, Finance Canada published a discussion paper in 2021, work was shifted to Treasury Board Secretariat where it seems to have disappeared.

• Prosperity: Income and Growth; Employment and Job Quality; Skills and Opportunity; Economic Security and Deprivation

• Health: Healthy People; Healthy Care Systems

• Environment: Environment and People; Ecological Integrity and Environmental Stewardship

• Society: Culture and Identity; Social Cohesion and Connections; Time Use

• Good Governance: Safety and Security; Democracy and Institutions; Justice and Human Rights

Statistics Canada also published a **discussion paper in 2021 on measuring well-being.**

Moving forward, Statistics Canada stands prepared to collaborate with federal and other partners to develop a framework and new well-being indicators that reflects core Canadian values, addresses the diversity of experiences and regional realities, and supports government decision-making.

https://www150.statcan.gc.ca/n1/pub/11f0019m/11f0019m2021006-eng.htm

Consider income distribution.

Gini coefficient, 0 = complete equality; 1 = complete inequality, 2019 or latest available. Source: OECD Social and Welfare Statistics: Income distribution

In order from MOST EQUAL to LEAST EQUAL for selected countries (World Bank)

Norway	.227
Belgium	.260
Netherlands	.260
Iceland	.260

Czeck Republic	.262
Iceland	.257
Finland	.271
Denmark	.275
Poland	.288
Sweden	.289
Ireland	.292
Hungary	.297
Austria	.298
France	.307
CANADA	**.317**
Germany	.317
United Kingdom	.326
Japan	.329
Switzerland	.331
Greece	.336
Australia	.343
Portugal	.347
Spain	.349
Italy	.352
Russia	.360
China	.371
United States	.398

Chile	.449
Mexico	.454
Brazil	.453
South Africa	.63

A familiar story on income distribution:

- Canada “middle of the road”
- Northern European countries among the best (most equal income distribution)
- United States among the worst (most unequal or least equal)

Two components of income distribution:

1. Market distribution
2. Impact on distribution from taxes and government transfers (government effort to change distribution)
   http://www.csls.ca/reports/csls2012-08.pdf

- Of 35 OECD countries, Canada does the **25th least** to improve the market distribution of income
- Taxes and transfers in Canada reduce 23.9 per cent of market inequality
- 70 per cent of the re-distribution is done through transfers
- 30 per cent through taxes

1980s – small rise in market inequality

- Offset by a rise in government re-distribution
- Net: not much change in income distribution

1990s – strong rise in market inequality

- And significant reduction in government efforts to re-distribute income

2000s – no significant change in market distribution or result of government re-distribution efforts

NOTE: seems odd, then, that attention to income inequality has risen in recent years when the problem has been stable and it seems to have been less of an issue when the problem was increasing.

Summary of Bank of Canada study on inequality:

Income inequality in Canada increased substantially during the 1980s and first half of the 1990s but has been relatively stable over the past 25 years. The largest and most persistent increases in the Gini coefficient (a measure of inequality in the underlying distribution, in this instance of household market income across the population) occurred during the recessions in the 1980s and 1990s. While many factors were at play over these periods, monetary policy actions to bring excessive inflation under control and to limit a further buildup of economic vulnerabilities partly played a role in these recessions.

• The main contributor to these earlier periods of increased inequality is low-income earners. This is consistent with members of this group being particularly hard hit by recessions and not recovering afterward, possibly because of hysteretic labour market effects. Meanwhile, the income of top earners recovered quickly after recessions and generally increased over the period.

• Women still lag men in terms of income, with a larger share of women receiving income below the median. Nonetheless, the share of women in the top 1% of income has increased sharply over the last four decades. This, together with increasing female labour market participation and their average income over time, has helped dampen the overall increase in inequality.

• The increased inequality has fallen mainly on younger people. Median incomes of those under 44 years old have either stagnated or fallen, while they have increased strongly for those 65 years or older. An increase in retirement income over the period explains this.

• Government transfers to households and the progressive nature of the personal income tax system in Canada have significantly reduced the level of income inequality and mitigated its increase during recessions. While data are not yet available, this is also likely to be the case in the context of government aid in response to the pandemic.

https://www.bankofcanada.ca/wp-content/uploads/2022/07/sdp2022-16.pdf

Low Income and Poverty in Canada

Two types of poverty**:** fairly permanent

Transitory

Within the bottom decile (10 per cent) of Canada's income distribution: 18 per cent stay there 8 years plus and 72 per cent leave in less than 8 years. 30-40 per cent turnover every year.

Transitory poverty calls for “safety net” income support.

Permanent poverty calls more for structural support.

Summary of Poverty using the 2021 Census.

Highlights

- Based on data from the 2021 Census of Population, the poverty rate in Canada was 8.1% in 2020, down from 14.5% in 2015.
- Poverty declined among all ages, but especially so for children. In 2020, the poverty rates of children aged 0 to 5 years (9.1%), 6 to 10 years (8.5%) and for youth aged 11 to 17 years (7.9%) were all less than half their levels in 2015.
- Declines in poverty were driven by higher government transfers in 2020, including the enhanced Canada Child Benefit (CCB) and temporary pandemic relief benefits.
- In 2020, the poverty rate for one-parent families headed by a woman with a child aged 0 to 5 was 31.3%, the highest among all family types, and more than five times the rate of couple-families with a child of the same age (6.0%).
- From 2015 to 2020, the poverty rate for one-parent families headed by a woman with a child aged 0 to 5 fell by more than half, declining from 62.7% to 31.3%.
- There was little difference between the poverty rates of cisgender women (7.9%) and cisgender men (8.2%) in 2020. However, transgender men (12.9%) and women (12.0%), were more likely to experience poverty than their cisgender counterparts. More than one in five (20.6%) non-binary people lived in poverty, more than twice the national rate.
- Despite higher income levels, poverty was more prevalent in large urban areas, reflecting higher costs of living. Among large urban centres, the poverty rate was highest in Vancouver

(11.2%), Halifax (10.5%) and Toronto (10.0%), and lowest in Québec (4.8%), Saguenay (5.3%) and Oshawa (5.3%).

- Census data can help shed light on the poverty experiences of the growing urban Indigenous population. In Winnipeg, which has the largest Indigenous population of all urban centres in Canada, 23.2% of First Nations people, 10.5% of Métis and 14.4% of Inuit lived in poverty in 2020. By comparison, in 2015, the corresponding proportions were 44.0% of First Nations people, 19.7% of Métis and 27.3% of Inuit.
- Among racialized groups, 10.8% of South Asian, 15.3% of Chinese and 12.4% of Black Canadians lived in poverty in 2020. The prevalence of poverty varied markedly between racialized groups[Note 1] and regions. For example, the poverty rate among Black Canadians was 15.8% in Winnipeg and 9.7% in Montréal.
- From 2015 to 2020, notable declines in poverty rates were recorded for most racialized groups in most urban centres. However, there were considerable differences. For example, the poverty rate for Arab Canadians in Regina in 2020 (16.3%) was less than one-third of its 2015 level (57.1%). In contrast, the poverty rate for Latin American Canadians in Winnipeg varied much less, from 2015 (17.5%) to 2020 (15.9%).
- The poverty rate of immigrants declined by more than half from 2015 to 2020, falling from 18.8% to 9.1%. However, poverty was more prevalent among immigrants than among the Canadian-born population, particularly among refugees and recent immigrants (those who landed in the five years preceding the census year).

https://www12.statcan.gc.ca/census-recensement/2021/as-sa/98-200-X/2021009/98-200-X2021009-eng.cfm

According to the MBM (Market Basket Measure), a family is considered to be in poverty if, given its size and region of residence, it does not have enough income to buy a set of goods and services considered to represent a modest, basic standard of living.

Canada’s One Percenters (based on Tax Data)

https://www150.statcan.gc.ca/n1/daily-quotidien/231110/t001a-eng.htm

Threshold to be in the top 1 Percent of Income Earners 2021	$271,300
Average income of top 1 Percent	579,100
Average – men	606,800
Average – women	500,800

Average income all tax filers	55,900
Average income of bottom 50%	21,100

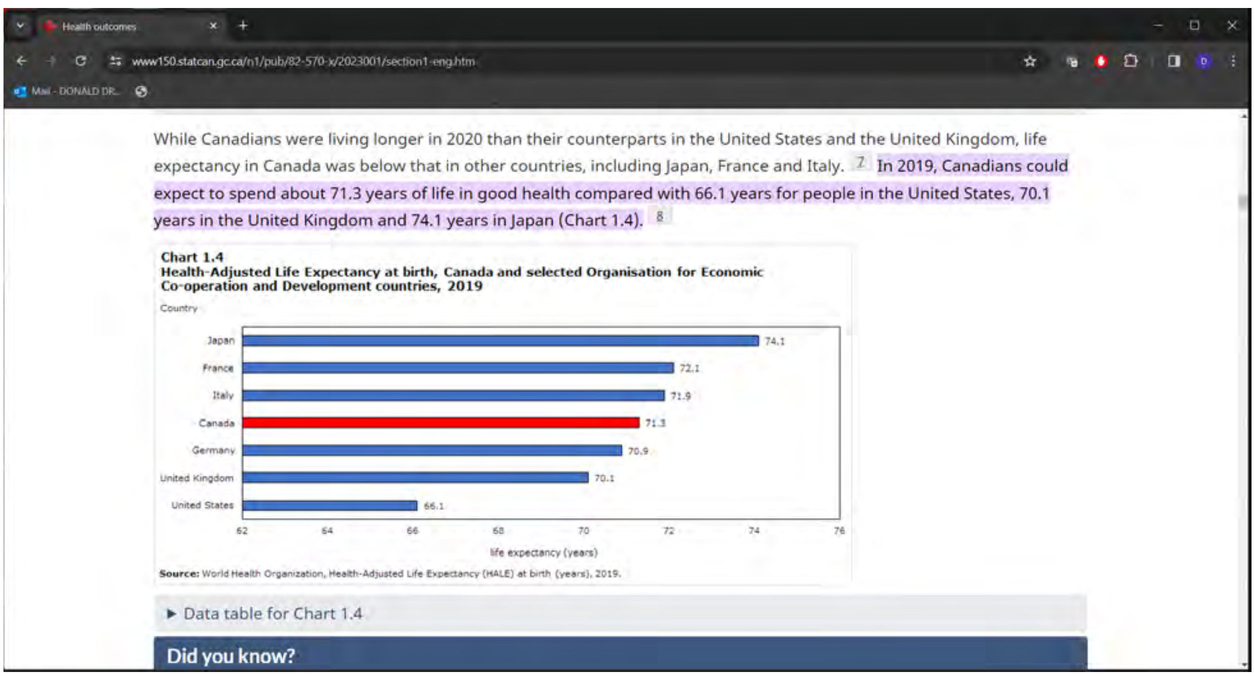
Is the Middle Class Shrinking/Suffering in Canada?

https://www.policyschool.ca/wp-content/uploads/2016/03/middle-class-cross-sheikh.pdf

While the middle class has seen its income grow, it has not kept pace with the income growth rate of higher earning groups. But not all members of the so-called middle class face the same plight. The workers who have lost the most ground relative to higher-income groups, are those with below-average human capital (that is, lower skill and education), and are at the lower end of the middle-income

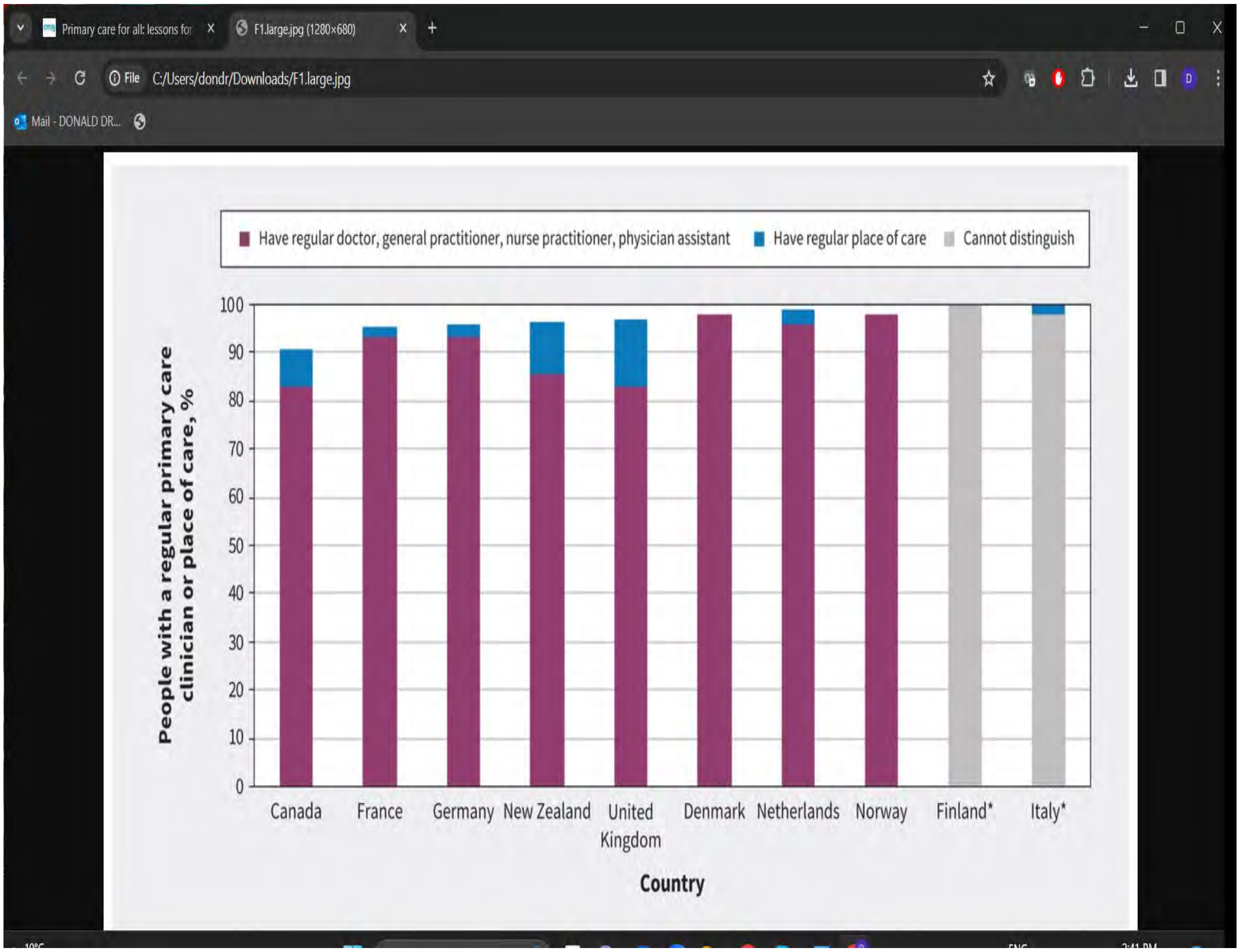
bracket. The largest source of downward pressure on middle-class incomes has been the decline of Canada’s manufacturing industry. Beginning in the postwar years, factory jobs developed a misplaced reputation for being well-paying middleclass work. In fact, the work provided generous pay and benefits only relative to the low human capital that was necessary to find employment in manufacturing. As manufacturing has declined across all industrialized countries, lower-skilled workers have been forced to accept lower rates of income growth. Meanwhile, more gains have been made by those with high levels of human capital. Public-sector professionals in particular have come to share the human-capital and income characteristics of Canada’s highest-paid managers and professionals, often enjoying greater job security as well. In reality, anxiety over the state of the middle class and its future is actually about the working class. Lumping middle-class factory workers and clerical assistants in with middle-class teachers and nurses — as current political discussion tends to do — obscures the truth about which members of that group are genuinely struggling to keep up. As long as politicians continue to promote policies aimed at helping everyone within such a vague and broad target group, they can only end up misdirecting resources by enriching those who are already doing reasonably well, rather than focusing on those working-class Canadians who truly are not. Already net transfers through the tax system to middle-income groups have grown markedly. These transfers have managed to offset about half the erosion of middle-class incomes in the marketplace. Those transfers have been financed through increased tax payments from high-income groups, but also through shrinking transfers to low-income groups. These developments raise serious policy issues for which there are no simple answers. The breadth of Canada's middle class obviously means that it encompasses the largest proportion of families, by far. Any further policies aimed at transferring wealth from other income groups to appease middle-class voters will be costly. Given that the main cause for concern is the worsening situation of lower skilled workers, politicians who truly want to help those struggling in the "middle class," should focus their efforts on helping Canadians acquire more education and more skills.

Health of Canadians is Middle-of-the-Road

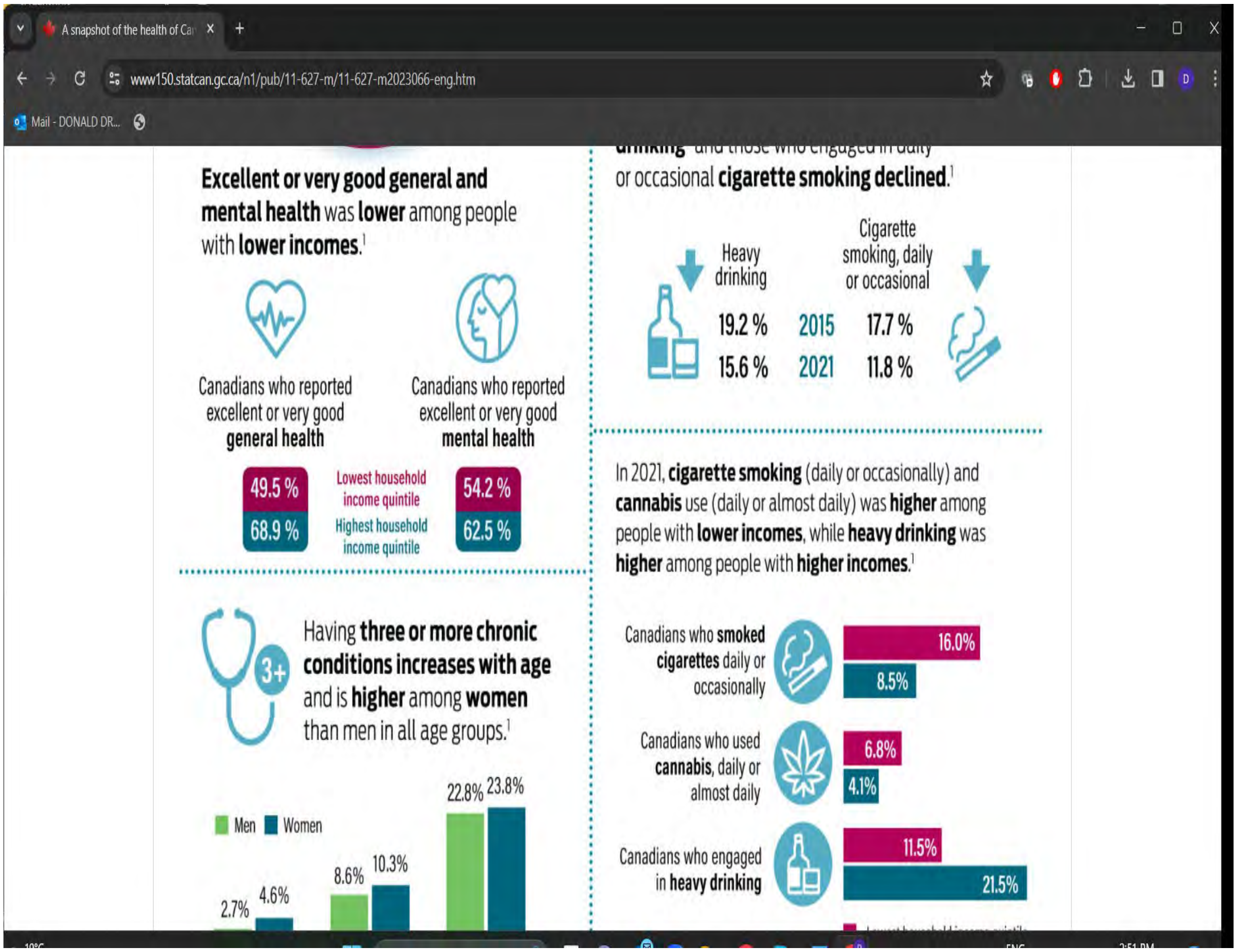


Canada's health-adjusted life expectancy is solid in international ranking but not outstanding. Note the lower life expectancy in the United States.

Canada lags many other countries in access to primary care.



Health strongly related to socio-economic status. Many analyses draw a link between health and income. In “reduced form” one can also use education as an explanatory variable of health.



https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2023066-eng.htm

Canada has high greenhouse gas emissions per capita

https://data.worldbank.org/indicator/EN.ATM.CO2E.PC

2020 Data

Rank	Country	CO2 emissions per capita
1	Australia	14.8 T
2	Saudia Arabia	14.3
3	**Canada**	**13.6**
4	United States	13.0
5	Russian Federation	11.2
6	Korea Republic	11.0
7	Japan	8.0
8	China	7.8
9	Poland	7.4
10	Germany	7.3
11	Islamic Republic of Iran	7.1
12	South Africa	6.7
13	Turkey	4.9
14	Italy	4.7
15	United Kingdom	4.6
16	France	4.0

Rank	Country	CO2 emissions per capita
17	Mexico	3.0
18	Indonesia	2.1
19	Brazil	1.9
20	India	1.6

Significant gap in male and female earnings

Gender wage gap OECD

Employees, Percentage, 20122 or latest Source: Earnings: Gross earnings: decile ratios
https://data.oecd.org/earnwage/gender-wage-gap.htm

Belgium	1.2%
Costa Rica	1.4
Columbia	1.8
Norway	4.5
Denmark	5.6
Italy	5.7
Spain	6.7
Greece	6.9
Sweden	7.2
Poland	8.7
New Zealand	9.2
Iceland	9.7
Australia	9.9

Chile	10.9
France	11.6
OECD – Total	12.1
Portugal	12.2
Hungary	13.1
Germany	13.5
Czechia	13.6
Switzerland	13.8
Slovak Republic	13.8
United Kiingdom	14.5
Finland	15.3
Mexico	16.7
United States	17.0
Canada	**17.1**
Japan	21.3
Israel	25.4
Japan	21.3
Korea	31.2

Canada has one of the largest gender earnings gap, similar to that in the United States.

As usual, the countries with the best results tend to be in Northern Europe.

Interesting (and paradoxical?) that the countries with the oldest labour forces (which are declining), Japan and Korea, have the largest gender wage gaps. Hmmm….

Miles Corak has estimated the relationship between income inequality and economic mobility across generations (what are the chances of ending of in a similar income/economic status as parents?).

A very familiar picture emerges.

Finland, Norway, Denmark and Sweden have relatively low income inequality and high economic mobility across generations (high probability of ending up better or worse but not the same as parents).

The United States, the United Kingdom and Italy are at the opposite end of the spectrum. High income equality and low economic mobility across generations (if parents are poor, children will be poor; if parents are rich, children will be rich).

Now a shocker. Canada (and Australia and New Zealand) lie smack in the middle of the results for the Northern European countries and the United States. Middle of the pack on income inequality; middle of the pack on economic mobility.

A key factor leading to low intergenerational mobility is education. Children of parents with lower levels of education tend to get less education themselves. And vice versus. Children of parents with higher levels of education (who tend to have higher incomes) tend to attain higher levels of education themselves. The higher are the returns to education, the lower intergenerational migration tends to be.

Interesting to consider two notions together: The United States tagging itself as “the land of opportunity” and the finding that it has the least intergenerational economic mobility.

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Health Policy

Don Drummond

Health economics seems to be an ill-defined discipline.

But economics can be applied to many dimensions of health policy.

We will deal with a few of those dimensions here.

1. Healthcare Spending. Size of the Healthcare Sector

NOTE: Spending estimates are always and everywhere for healthcare. Not for health. To measure spending on the latter, we would need to look at policy arenas like education which support better health outcomes.

There is even controversy on how "health" should be defined. Conventional definitions, such

as in Oxford, are:

the state of being free from illness or injury.

It is put in the "negative".

A "positive" definition would be more like:

Health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. **Positive health** consists of six dimensions: bodily functions, mental functions & perceptions, spiritual dimension, quality of life, social & societal participation, daily functioning.

Healthcare spending in 2023 is estimated by CIHI to have been $344 billion.

12.1 per cent of Gross Domestic Product

$8,740 per capita.

Related to age. Per capita spending for 80 plus cohort is 6 times that for age 1-64.

Hospitals 26 per cent; Drugs 14; Physicians 14; Other Professionals 11; Public Health 6

71 percent of spending is public; 29 percent private. OECD average is 73 percent public. But Canada's structure is unique with almost all primary care public, about half of drugs public and only about 10 percent of everything else. In most countries coverage is more even.

12.1 percent of GDP compares to 9.2 percent for OECD average (2022), but the United States was 16.6 percent. And public coverage in the U.S. is only around half. The U.S. is a big outlier on cost and funding sources.

Size of healthcare often thought of as an "economic drag"

But could be looked at differently. A huge sector with good paying jobs (on average, at the top end, but not for everyone such as PSWs, service staff in nursing homes, homecare workers), research and development and advancing technology.

4th largest sector after real estate, manufacturing and mining.

2 million employees. 2nd largest after all trade (retail, wholesale…)

Long-standing difficulty hiring nurses and workers for residential care facilities

Uneven coverage of specialists. For example, 11.7 geriatricians per 100,000 population 75+ (few rheumatologists as well) while 48.8 pediatricians for population under 15.

Any labour planning?

Mostly controlled through regulation and much of regulation is concerned with limiting supply.

Further, the control is to a large degree controlled by the Associations of healthcare professionals. It is in the interest of existing members to control labour supply and resist changes to "scope of practice".

Healthcare rarely analyzed for its role in economic cycles. Yet healthcare spending is highly cyclical as overall government spending ebbs and flows and healthcare is by far the largest spending component of provincial spending (almost ½ total program spending).

Big sector. Lots of spending. Lots of workers. Many good paying jobs. Big part of the economy. Restricted "market" influences. Rarely looked at from the perspective of being part of the economy.

2. Is Healthcare Spending Sustainable?

Question is often asked. But seems a meaningless question. Almost anything can be made sustainable if one sacrifices other things. The question is whether the healthcare we are getting is worth the sacrifices?

Healthcare spending rose rapidly from the late 1990s until 2010. Has had relatively modest growth since.

	Healthcare growth rate	%GDP	CHT growth rate
2011	3.3	11.3	6.0
2012	3.1	11.4	6.0
2013	1.9	11.2	6.0
2014	3.1	10.9	6.0
2015	4.4	11.5	6.0
2016	4.1	11.8	6.0
2017	4.1	11.6	3.0
2018	4.6	11.5	3.9
2019	4.6	11.7	4.6

2020	13.1	13.8	3.7
2021	7.8	13.1	3.0
2022	1.5	12.8	4.8
2023	2.8	12.1	9.3

Healthcare spending as a percentage of GDP was pretty flat 2011-2019.

Suggested spending was "sustainable".

But a) there were consequences to the modest pace of spending growth that suggest underlying unsustainability.

a) As to consequences of relative spending restraint, consider: the tight rein on capital spending, especially 2011 through 2014; the squeeze on hospital budgets that has left some operations compromised and; Ontario's 3 per cent across-the-board cut in physician compensation (2015) that is being subsequently reversed through arbitration.
b) 2011-2019, spending growth was below the pace suggested by "cost drivers" and pent-up cot pressures were building.

Spending exploded in 2020 due to COVID-19. It increased strongly again in 2021 and is still being restored to pre-pandemic norms – note in 2023 spending as a share of GDP was 12.1 compared to 11.7 percent in 2019.

Future Cost Drivers (effect on health spending growth rate)

Demographic 1 percentage point population growth*

1 percentage point population ageing

Inflation 2 percentage point general inflation rate**

½ percentage point health sector premium (higher labour content, productivity gains tend to go to increased interventions rather than cost cutting)

Intensity of use 1 ½ percentage point, could rise if new opportunities arise for health interventions

TOTAL 6 per cent. Can be thought of as "status quo" spending growth rate (compared to the 5.2 per cent the Premiers refer to which comes from a similar methodology used by the Conference Board of Canada)

* Canada's population growth was long around 1 percent per annum but recently has risen much faster than that due to much higher immigration. Immigration numbers have been capped for now and a lower ceiling for temporary residents is to be announced in September 2024. So Canada's population growth may return closer to 1 percent per annum.

**The Bank of Canada-Government of Canada inflation target has centered on 2 per cent since the early 1990s and on average actual inflation has been extremely close to the target. Note, however, that inflation was much higher than 2 per cent prior to the early 1990s and currently inflation is high.

NOTE: IF the federal government maintains the current legislation for the Canada Health Transfer (CHT to grow at moving average of nominal GDP growth), the burden of "unsustainability" will fall on provinces)

Status quo growth rate of nominal GDP:

- Real GDP growth rate for Canada over next 20 or so years – about 1.5 per cent (0.5 percentage points from labour as combination of labour force growth rate and expected continuing downward trend in hours worked) plus 2 per cent inflation rate = 3.5 per cent nominal GDP growth rate
- Note one could add a "catch-up" component to this over the next several years

Collision course: health spending growing 6 per cent per annum, revenues growing about 3.5 per cent for provinces from own-source revenues (revenue "elasticity" with respect to nominal GDP is around 1) and from federal transfers.

How to avoid or mitigate the collision:

a) Bend the cost curve down – but how without compromising access and quality (and avoiding costs incurred 2011 – 2019)
b) Squeeze very hard on all other spending (but voters do want education, parks, police services). For a time the school-age population was declining, allowing education spending to be curtailed, but the grandchildren of the baby boomers have arrived at schools, adding cost pressures in education.
c) Raise taxes. But not just once, fairly regularly to make up for a growing gap between spending and revenue.

https://www.cdhowe.org/intelligence-memos/drummond-sinclair-straight-talk-about-healthcare-costs

More interesting question: Is what we are getting from healthcare worth sacrificing a lot?

Difficult to answer.

First must ask what the objective is.

Presumably it is health.

It is always the first interest of people. A healthy population is also a productive population (more output, fewer public and private costs).

So a) for the most part we are focusing on the wrong thing – care instead of health

And b) for the most part we measure the wrong thing – dollars spent on care instead of health outcomes

Critical to all policy is definition of the objective. Then align policy and operations to achieve the objective.

We do not do that in health.

How do Canadian health outcomes stack up relative to the money spent?

Few measures we can rely on.

Those we have are partial or extremely general, such as longevity. There has been an attempt of late to "health adjusted" longevity measures, but the yardsticks remain crude and do not capture "quality of life". Most measures, as with the traditional definition of "health", focus on the **failure of health**, not health itself.

Consider this quote from the OECD:

Canada's population is slightly healthier than the OECD average, considering life expectancy and other general measures of health status. Smoking and alcohol consumption are also a little lower than the OECD average, but obesity rates are high. Indicators for access and quality of care are generally good, achieved with a level of health spending not much higher than the OECD average.

In general, the message is we are "middle of the road".

Is that good enough? It should not be.

https://www.cdhowe.org/intelligence-memos/drummond-sinclair-fixing-medicare

https://www.cdhowe.org/sites/default/files/2022-01/IM-Drummond%20and%20Sinclair%20_2022_01_07.pdf

3. What if we thought of health as a "production function"?

Well, we would be accused of being "cold hearted".

But let us persist.

The "product" would be health (not healthcare).

What about the inputs?

In reality, they would be $spent, doctors, drugs et cetera.

But let us consider an alternative perspective.

- Many studies suggest much of health outcomes is determined by socio-economic conditions

- smoking accounts for 22 per cent of men's and 12 per cent of women's hospital bed-days; physical inactivity accounts for 11 per cent and 13 per cent respectively; the 4 lifestyle factors combined account for 36 per cent of men's and 27 per cent of women's hospital bed-days (Kieran Moore).

Hmm. These observations suggest there is poor alignment between the inputs and the output/objective. More attention should be placed on socio-economic conditions and "lifestyle" issues. Public health would not be treated as a poor, isolated cousin.

Instead, the model is more of waiting for health to break and then trying to patch the person back up.

According to the Commonwealth Fund
https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_fund_report_2014_may_1749_bachrach_addressing_patients_social_needs_v2.pdf:

Extensive research documents the impact of social factors such as income, educational attainment, access to food and housing, and employment status on the health and longevity of Americans, particularly lower-income populations. These findings attribute as much as 40 percent of health outcomes to social and economic factors. Asthma is linked to living conditions, diabetes-related hospital admissions to food insecurity, and greater use of the emergency room to homelessness. These findings are not lost on health care providers: 80 percent of physicians conclude that addressing patients' social needs is as critical as addressing their medical needs. Yet until recently, providers rarely addressed patients' unmet social needs in clinical settings.

The **Keon** Canadian Senate report of 2009 (https://sencanada.ca/content/sen/committee/402/popu/rep/rephealth1jun09-e.pdf) decomposed the determinants of health as follows:

Health Care System	25 per cent
Biology and Organic Make-up	15
Housing (or lack of adequate housing)	10
Socio-economic	50

- early childhood development
- education
- income and social status
- employment and working conditions
- culture and gender

In brief, a traditional perspective on health or the "healthcare system" looks at things that account for a fairly small portion of population health.

We often hear that the silos of healthcare need to be better co-ordinated. The determinants of health call for co-ordination of many aspects of economic and social policy. Yet little co-ordination takes place and policies such as education and housing are rarely viewed as health matters.

Health is often linked to income with a positive relationship found. One can also link health with education and literacy. In a sense, the link to education is a "reduced form" variant.

Self-assessment of "good health"

A greater proportion of people living in households in the highest income quintile reported excellent or very good general (68.9%) and mental (62.5%) health compared with people in the lowest household income quintile (49.5% and 54.2%, respectively).

https://www150.statcan.gc.ca/n1/pub/82-570-x/2023001/section1-eng.htm#a1_1

People with higher levels of education or a higher income have longer life expectancies and are expected to spend a greater portion of those years in good health compared with those with less education or with a lower income.

https://www150.statcan.gc.ca/n1/pub/82-003-x/2020001/article/00001-eng.htm

The “residual” term in a production function is traditionally productivity. Let us think of it as efficiency in this context.

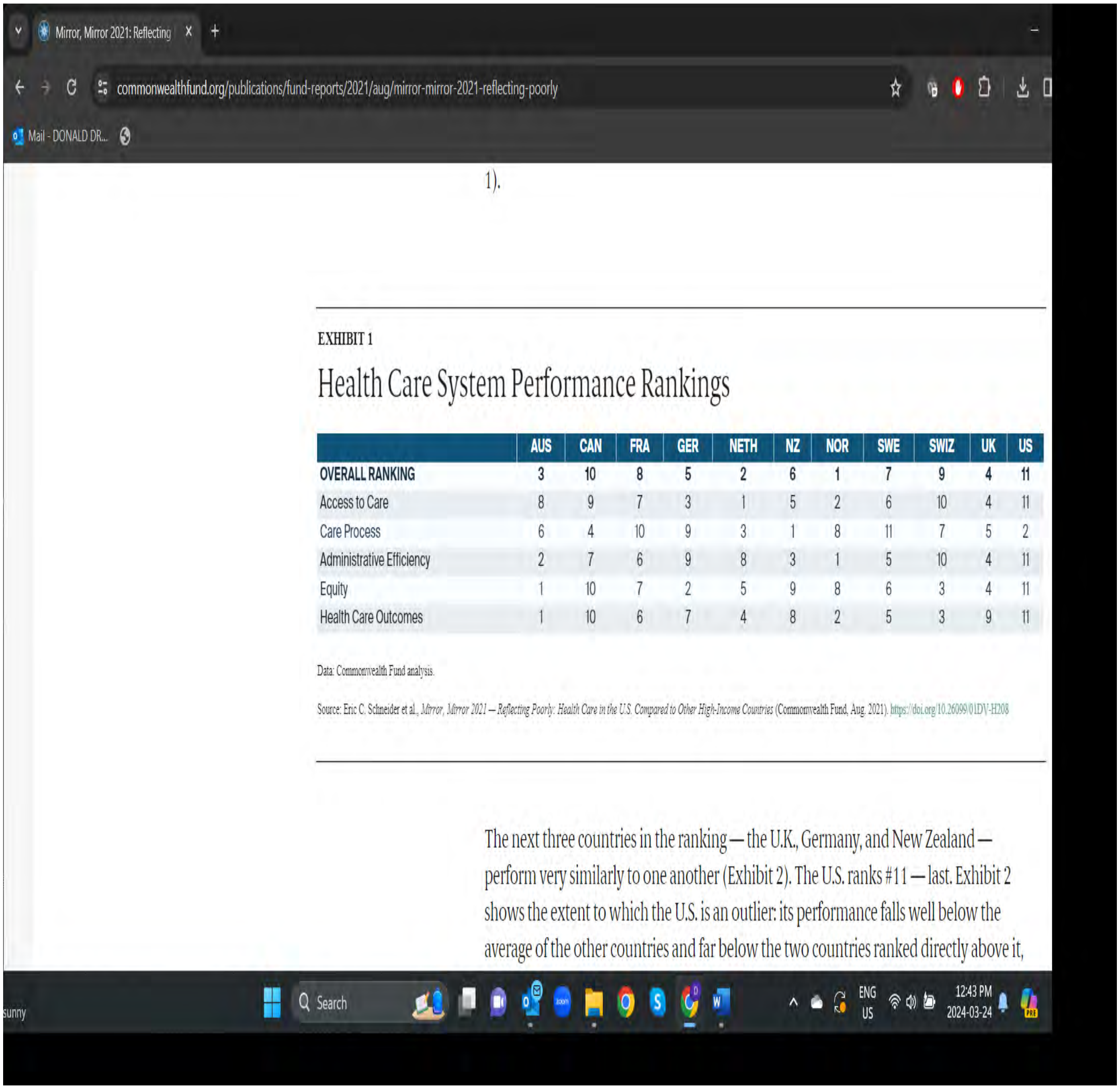
There are suggestions that inefficiency in healthcare accounts for (wastes) at least one-fifth of spending and perhaps as much as 30 per cent (OECD and Incentives for Health: A Dialogue with the Queen’s Health Policy Council, November 20, 2018).

OECD 2010, “Health care systems: Getting more value for money”, OECD Economics Department Policy Notes, No. 2.

Suggests 30 per cent of Canadian public health care spending is “wasted” relative to what would be required under a hypothetical “efficient” system.

The Commonwealth Fund analyses the effectiveness and efficiency of healthcare systems.

Here is their 2021analysis:



1).

EXHIBIT 1

Health Care System Performance Rankings

	AUS	CAN	FRA	GER	NETH	NZ	NOR	SWE	SWIZ	UK	US
OVERALL RANKING	**3**	**10**	**8**	**5**	**2**	**6**	**1**	**7**	**9**	**4**	**11**
Access to Care	8	9	7	3	1	5	2	6	10	4	11
Care Process	6	4	10	9	3	1	8	11	7	5	2
Administrative Efficiency	2	7	6	9	8	3	1	5	10	4	11
Equity	1	10	7	2	5	9	8	6	3	4	11
Health Care Outcomes	1	10	6	7	4	8	2	5	3	9	11

Data: Commonwealth Fund analysis.

Source: Eric C. Schneider et al., *Mirror, Mirror 2021 — Reflecting Poorly: Health Care in the U.S. Compared to Other High-Income Countries* (Commonwealth Fund, Aug. 2021). https://doi.org/10.26099/01DV-H208

The next three countries in the ranking — the U.K., Germany, and New Zealand — perform very similarly to one another (Exhibit 2). The U.S. ranks #11 — last. Exhibit 2 shows the extent to which the U.S. is an outlier: its performance falls well below the average of the other countries and far below the two countries ranked directly above it,

Ouch! If not for the United States, we would be last on most measures that count the most!

Canadians pride themselves in our public healthcare system. Not really public (30 per cent privately funded and the public portion is largely public funding of a private system). Yes, focuses on healthcare, but less on health. Not really a system but rather somewhat connected silos.

Shows we should stop relentlessly comparing ourselves only to the United States. They are **11 and last**. Should instead look at countries like Norway, the Netherlands and the UK.

Even on aspects where one might think our public, single payer model (but again, we do not have higher public coverage than the OECD average!) would present an advantage, we do badly: 9th on access (long wait times especially for specialists, unaffordability of medication for those without insurance), 10th on equity and 10th on outcomes.

https://www.commonwealthfund.org/publications/fund-reports/2021/aug/mirror-mirror-2021-reflecting-poorly

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Reducing inefficiency would involve things like teamwork, role differentiation of health service providers, care coordination, et cetera.

NOTE: While Chief of Staff, Ottawa General Hospital, Dr. Jeffrey Turnbull said he could lower costs 30 per cent if he had a free hand on allocating labour, and it would not have a deleterious effect on access or quality of care.

4. Incentives and Health/Healthcare

Much of economics is based on the premise people respond to incentives, financial or otherwise.

How do incentives play into health/healthcare? Or, more to the point, how do they **NOT** play or distort?

- Incentives (remuneration) are to do health interventions. Incentives are not offered for health outcomes. Indeed, healthy clients might be financial ruin for healthcare professionals (those under fee-for-service).
- Remuneration for physicians has traditionally been fee-for-service. Incents excessive service.
- Physicians get paid for referrals for diagnostics. CIHI (https://www.cmaj.ca/content/189/16/E620) found that up to 30 per cent of diagnostic tests ordered contravened expert medical guidelines. Why were they ordered?
- Fixed salary incents under service.
- Neither seems right in pure form.

- There has been a tendency to think of APP as, literally, an alternative to FFS, replacing FFS payments with other forms of compensation. While this was the case in the early years of APPs in Canada, there has been an increasing tendency in recent years to use APP as a supplement to FFS compensation.
- Fee schedules not generally conducive to virtual consultations.

Since the introduction of the public medical care system in the 1960s, most physicians in Canada have been compensated through FFS payments. Alternative payment plan (APP) programs first became prevalent in the mid-1990s and have become an increasingly popular method of remuneration to physicians in the last 2 decades. Payments through alternative methods have shown a slight decrease from nearly 30% of total clinical payments in 2012–2013 to 27.4% in 2017–2018. Alternative methods of paying physicians include salaries, sessional and hourly rates, capitation models and contract-based payments. Many physicians receive compensation through multiple models, which could include both FFS and alternative payments; however, funding through the different payment models varies significantly across jurisdictions.

https://www.cihi.ca/sites/default/files/document/physicians-in-canada-2018.pdf

5. Vertical and Horizontal Integration

Vertical integration involves patient pathways to treat named medical conditions that transcend organisational boundaries and connect community-based generalists with largely hospital-sited specialists.

Horizontal integration involves peer-based and cross-sectoral collaboration to improve overall health.

Vertical integration is weak. People are often on the wrong pathway with all kinds of dead ends.

Very little horizontal integration.

Consider the Ontario Government. It has never seemed comfortable with the co-ordination part (Alberta, Saskatchewan and others in the same camp). Get Government out of administration. Create LHINs. Blow up the LHINS. Create OHTs. Say they will be independent of Government. But build a giant thumb over them in legislation. AND physicians not integrated. No explicit allowance for administration. Falls, by default of capacity, to hospitals despite desire to de-hospitalize much of care. Are hospitals the right administrative center? Is that an appropriate role for them? What exactly was wrong with the LHINs that could not have been fixed within that framework.

It is discouraging that the things that prevented the LHINs from being more successful seem to be getting replicated with the Ontario Health Teams. The Ontario Government did not give the LHINs latitude to address regional health needs with regional approaches. They had to depend upon the Minister and Ministry of Health & Long-term Care for authority. The design of the OHTs, and particularly the proposed legislation, does not suggest these aspects will change much.

6. Comparative Advantage

A difficult concept for some to grasp.

Inclination to think something should be done by whoever is best at it. But in the whole, that is not optimal.

Nurses claim they can do about 70 per cent of what doctors do.

Nobody, including doctors, should fear implementation of scope of practice would leave doctors idle. Their time could be free of routine procedures to focus on health promotion and following up on prescribed treatment after diagnosis.

Witness about 29 nurse practitioner-led clinics in Ontario. Fewer calls to doctors than anticipated. Generally high patient satisfaction results.

Witness wait times at physician walk-in clinics and the general absence or nurses (practitioner, triage and otherwise).

7. Industrial Relations

A confrontational relationship**.**

Until recently physicians did not generally have access to arbitration. Put favour into hands of Government. Plus Governments have resorted to over-riding agreements (Ontario's pay cut 2015, Alberta trying to do the same right now).

Interesting arbitration award in Ontario is 2019. Forces Government and physicians to work together to identify cost savings. One could note, however, that previous attempts in Ontario at collaboration (in the Rae administration and examination of the fee schedule by John Wade & Co. using the Resource-Based Relative Value Principle) faded without achieving much.

Compensation model fosters physician burn out, lots of time to administration.

Traditional model was stand-alone physician being paid under fee-for-service.

Anecdotally, young physicians and students seem to want:

- Better work-life balance
- Work in teams
- More like an employment arrangement with salary, benefits (including pension, parental leave, sick et cetera).

Interestingly, this perspective was not promoted at all by the Ontario Medical Association in the last round of negotiations, mediation and arbitration.

8. Pharmacare: Big Bang or Fill in the Gaps

Government's Advisory Council (https://www.canada.ca/en/health-canada/corporate/about-health-canada/public-engagement/external-advisory-bodies/implementation-national-pharmacare/final-report.html) strongly recommended Big Bang (wholly public system to replace existing private insurance) rather than filling existing gaps between public and private coverage

Question involves some subjectivity and surveys show different results, but generally find that between 5 and 13 per cent of Canadians cannot afford their prescriptions or do not take them as recommended due to cost.

A Statistics Canada survey (https://www.canada.ca/en/health-canada/corporate/about-health-canada/public-engagement/external-advisory-bodies/implementation-national-pharmacare/final-report.html) found almost 1 million Canadians skimped on food and rent to pay for pharmaceuticals.

Replacing private insurance would be controversial because many are relatively satisfied with their plan and fear they will lose choice under a public plan (although a basic public plan could be complemented with private, supplementary plans, just as existing health care insurance plans might enable a private room if the public plan only covers a shared room).

Communications of a potential big bang have gotten off to a bad start. The lead is typically the increased cost. But overall, the cost would be reduced (especially if combined with a more effective/efficient/cheaper way or procuring drugs). In large part it would be a shift from private cost (contributions to private insurance) to contributions to a public plan. These individuals would not pay more in total; more likely to pay less.

Pharmacare is beginning with a fairly tiny step: public coverage of diabetes and contraceptives only. No source of funds has been identified. So it will be covered by general revenue which, at this time and the foreseeable future, means the money will be borrowed.

9. COVID-19

Can analyze the impacts of COVID-19 through a framework that has 3 components.

a) What pre-existing conditions in public policy influence the pandemic and the response to it
b) How have policy authorities been reacting?
c) What is the likely policy aftermath after the pandemic subsides?

a) Pre-existing Conditions

Health:

- Operating budgets squeezed, especially for hospitals

- Inefficient/ineffective distribution of patients (Alternative Level of Care – typically more than 10 per cent of people in hospital should not be there – and they tend to be there longer than people who should be there)
- Capital shortages due to budget restraint hitting that area particularly hard
- Weak co-ordination of care across the components, although strengthened somewhat very recently through efforts to establish Ontario Health Teams
- Little use of virtual visits and procedures by digital means, in part because compensation schemes did not facilitate
- Critical failures in learning the lessons of SARs and other pandemics – not checking operation of equipment stored for pandemics, not putting in place better procedures to protect health workers
- Beginning to expand capacity of long-term care with a sense demand would always outstrip supply; less interest in homecare
- Shortage of personal care/homecare workers, in part due to low compensation
- Serious homelessness problem
- Low capacity for testing
- Poor health/healthcare and inadequate/dangerous housing in First Nations (vulnerable to virus contagion)
- Great variation in EMR/EHRs among providers (institutional and individual) makes reporting of consistent data impossible. Inconsistent approaches across provinces. Nationally, means planning (such as for a pandemic) is compromised.
-

Other Policies

- Fortunate the federal debt burden was moderate but would have been better had fiscal and monetary policies "re-normalized" when the economy was in great shape
- Well-capitalized financial sector
- Households and several provinces already vulnerable due to high debt, despite (in part because of) low interest rates
- Many people left particularly vulnerable due to gaps in pre-existing income support programs.
- Employment Insurance covers just over half of workers. Count the wait time and the exhaustion of benefits, and only about one-third of unemployed get benefits
- Typically, no support for workers without children making modest-to-moderate income
- High dependency upon global supply chains, even for medical supplies

b) Reaction to Pandemic

Just note here how rapidly some thing changed. Such as virtual visits, prescriptions by email, consultation by physicians with specialists by email, e-based triage, primary care and patient e-linked with social, community and home care.

Ontario and OMA quickly reached an agreement on compensation for virtual visits (although it extended use of fee-for-service)

COVID-19 forced a need for hospitals to clear as many ALCs as feasible to prepare for the surge of severely affected pandemic victims – was achieved through some co-ordination of providers.

On the **non-health** parts that there is an unprecedented effort by federal, provincial, territorial and municipal governments to support employment, income, liquidity and business finances. There will still likely be a need, in a few months (if and when the pandemic subsides) for a more traditional fiscal stimulus package to ensure an economic recovery takes root and has some momentum and legs.

Economies typically go down fast and hard in recessions and come back fast and hard as well. But the underlying structure of the economy – business finance, household finance et cetera – gets strained but not broken. With COPID-19 a lot of the economic underpinning could get broken within a few months. Many businesses will close and may not be able to re-open. Employer-employee relations will be broken and may not be able to restart.

c) Likely Aftermath of Pandemic

Health

- Likely greater attention to capacity of all components of health/healthcare, especially hospitals
- Hopefully renewed attention to co-ordination of care. Like shifting more resources to home and community care. A system-wide information system.
- Effective creation of the Ontario Health Teams.
- Likely recognition not all of the long-term care capacity being built will be used or is desirable. Some of the capacity could be re-directed to things like rehabilitation.
- Enhanced services, strategies, safe spaces for the homeless
- Likely greater use of virtual consultations/care – will protocols follow on when this approach is appropriate and will there be ways of co-ordinating health promotion and care in the virtual space? Will the compensation for virtual care extend beyond fee-for-service?

Non-health

- Look anew at establishing a more comprehensive basic/guaranteed income
- Fill yawning gaps in income support programs
- Very difficult job to return to fiscal balance especially as another round of fiscal injection will likely be required to boost economic recovery
- Very difficult job to return to "neutral" on monetary/financial policy
- Keep in mind, even a decade after the 2008 financial crisis and ensuing recession, neither monetary nor fiscal policy had "normalized"
- Risks of financial imbalances the longer policies are not normalized (savings, for example, hammered by low interest rates while debt is encouraged)

- Austerity could fall disproportionately on the vulnerable (students paying higher taxes and contributions over their careers, for example)
- household debt will be even higher (just look at all the mortgage payment deferrals)
- will we get the level of "state economic intervention" reined back?
- Will we try to establish a new/different industrial strategy (less reliance on global value chains more focus on domestic production capacity, certainly for “essential goods”

Selected References

https://www.td.com/document/PDF/economics/special/td-economics-special-db0510-health-care.pdf

https://www.fin.gov.on.ca/en/reformcommission/

current system and an ideal reformed system are laid out in the following charts.

General Approach	
• Intervention after a problem occurs • Acute care • Hospital-centric • Silos • Resource-intensive minority of patients in regular system • Accept socio-economic weaknesses • Extraordinary interventions at end of life	• Health promotion • Chronic care • Patient-centric • Co-ordination across a continuum of care • Dedicated channels for the resource-intensive minority • Address socio-economic weaknesses • Pre-agreements on end-of-life care
Hospitals	
• Draw patients to hospitals	• Keep patients out of hospitals

• Historical cost plus inflation financing • Managed through central government • Homogeneous, all trying to offer all services	• Blend of base funding and pay-by-activity • Regional management • Differentiation and specialization along with specialized clinics
Long-Term Care, Community Care and Home Care	
• Not integrated, underfunded and weight on long-term care	• Integrated with weight on home care
Physicians and Other Professionals	
• Not integrated with hospitals and other sectors • Work alone or in groups • Mostly fee-for-service funding • Few standards for medical approaches/conduct of practice • Unclear objectives and weak accountability • Inefficient allocation of responsibilities	• Integrated with primary care being the hub for most patients • Work in clinics • Blend of salary/capitation and fee-for-outcomes • Evidence-based guidelines (through quality councils) • Objectives from regional health authorities and accountability buttressed by electronic records • Allocation in accordance with respective skills and costs; and where feasible shifting services to lower-cost care-providers
Pharmaceuticals	
• Little cost discipline from governments • Cost of plans to private employers driven in good part by employees	• Cost discipline through purchasing power, guidelines for conduct of practice • Greater control exercised by employers
Service Delivery	
• Mostly public sector	• Blend of public and private sector (within public payer model)
Information Technology	
• Little used by physicians and especially across the system • Information conveyed in doctors' offices	• Extensive use that is key to co-ordination across system and accountability • Information more easily available and conveyed through multiple sources (phone, Internet, etc.)
Medical Schools	

• No attention to system (cost) issues • Little attention to labour supply issues	• Course(s) on system issues • Role in directing physicians to areas of demand (by area of medicine and geographically)
Coverage of Public Payer Model	
• Hybrid with almost 100 per cent primary, less than half of drugs and limited mental health	• Broader coverage widely recommended but not at all clear this will be acted upon

Sustainability of Healthcare in Ontario. Don Drummond. March 31, 2018. Commissioned by the Ontario Government in the context of arbitration with the Ontario Medical Association. Unpublished.

MPA 887 Reform of Public Services

Summer 2024

Macroeconomic and Global Issues

1. Long-standing problem that fiscal policy is rarely used optimally. Weak adherence to anchors (balanced budgets over a cycle, reasonable debt burden). Often pro-cyclical. Tighten when budgets rise due to weakening economy. Spend more when revenues increase strongly due to strong economy.

Controversy over use of “fiscal rules”. Reality suggests they are not needed if politicians want to “do the right thing”. They are ignored or changed when politicians do not want to abide by them.

2. Monetary policy used to be inclined to producing significant inflation, including in Canada. Beginning in the late 1980s, many central banks went to inflation targeting (1991 in Canada). Produced relatively low, stable inflation and with it relatively stable economies – for a while. By 2008 financial imbalances had soared around the world. Especially in the United States and Europe. Regulators did not do their job properly. Banks took advantage of lax regulation to run high leverage ratios. Syndicated debt so it was off their books. Investors were not diligent in analyzing risk. Financial system crashed in 2008 – without (rare!) inflation and high interest rates having been the problem. Most monetary authorities ran expansionary monetary policy from 2008 until recently. The low interest rates and high liquidity encouraged debt and hammered savers.

3. By early 2020, many economies operating at full/normal capacity. Inflation well contained. But interest rates, despite some increases, still well below “neutral”. Canada and the U.S. good examples. Economies strong. But monetary policy expansionary. Large fiscal deficits. Out of equilibrium. Set poor pre-existing conditions for the pandemic.

4. Potential economic growth rates shifting down in most countries due to a) weaker labour force growth (ageing) b) trend decline in hours worked in many countries and c) failure to raise the modest pace of productivity growth since around 2000. But, a general failure to recognize this shift. Striving through demand stimulus to attain growth rates above potential.

Congressional Budget Office estimates U.S. potential growth is 1.8 per cent (Trump’s Budget assumes 3 per cent) csls2015-08.pdf × grab screenshot windows - Goo ×

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Table 6: Long-term Economic Growth Projections, using 2 Per Cent GDP Deflator Growth, Compound Annual Growth Rates, Per Cent, Canada and the Provinces and Territories, 2000-2014, 2014-2026 and 2026-2038

Panel A: Growth in Hours Worked, Labour Productivity and Real GDP

	2000-2014			2014-2026			2026-2038		
	Hours Worked	Labour Productivity	Real GDP	Hours Worked	Labour Productivity	Real GDP	Hours Worked	Labour Productivity	Real GDP
Canada	1.03	0.99	2.03	0.55	0.99	1.54	0.57	0.99	1.57
Newfoundland and Labrador	0.87	1.66	2.54	-1.09	1.66	0.54	-1.09	1.66	0.55
Prince Edward Island	0.81	1.01	1.82	0.62	1.01	1.63	0.55	1.01	1.56
Nova Scotia	0.29	1.11	1.40	-0.42	1.11	0.69	-0.39	1.11	0.71
New Brunswick	-0.03	1.16	1.14	-0.39	1.16	0.77	-0.40	1.16	0.76
Quebec	0.62	0.96	1.59	0.22	0.96	1.18	0.26	0.96	1.22
Ontario	0.78	0.88	1.67	0.54	0.88	1.42	0.53	0.88	1.41
Manitoba	0.62	1.54	2.17	0.77	1.54	2.32	0.79	1.54	2.34
Saskatchewan	0.91	1.42	2.35	0.41	1.42	1.83	0.47	1.42	1.90
Alberta	2.39	0.80	3.21	1.51	0.80	2.32	1.47	0.80	2.28
British Columbia	1.02	1.40	2.44	0.73	1.40	2.14	0.73	1.40	2.15
Yukon	2.27	1.20	3.49	0.24	1.20	1.45	0.33	1.20	1.54
Northwest Territories	2.41	-0.50	1.90	-0.19	-0.50	-0.69	-0.29	-0.50	-0.79
Nunavut	3.36	0.97	4.36	0.84	0.97	1.81	0.67	0.97	1.64

Note: Labour productivity is defined as real GDP per hour worked. The figures for the territories for 2000-2014 are actually for 2000-2013.
Source: CSLS calculations based on Statistics Canada data.

5. Risks applying too many demand-creating policies that will create imbalances and applying too little attention to structural policies that might enhance potential growth (higher labour force, more hours, greater productivity).
6. Structural shocks (global agriculture, supply chain problems due to pandemic, energy shock from Russia et cetera), pent-up demand from the pandemic and expansionary fiscal and monetary policies created excess demand and high inflation in many countries in 2022 and 2023. Interest rates and at least moderation in fiscal stimulus are helping bring inflation rates back to targets, but in most countries they remain elevated. The world is waiting for an interest rate cutting cycle to begin. But interest rates are not that much above "neutral" levels (an interest rate consistent with keeping inflation at target).
7. Some lessons that should have been learned from the 2008-10 experience that were not. The pandemic experience will exacerbate the problems post-crisis. See notes below on Lessons from the Financial Crisis.

8.

9. With a combination of slow growth (ageing population, modest productivity), high healthcare cost growth and high debt burdens, it is questionable whether all provinces are financially sustainable.
10. The Parliamentary Budget Office says federal and provincial finances are "sustainable" through this decade BUT:

- They assume the effective interest rate will be below the nominal growth rate and that does not make sense, nor it is the historical norm
- They assume there will be no economic shocks with lingering damage (we've had a financial crisis and a health crisis, climate-related shocks are increasing in number and severity).

How Did the World Economy Get So Messed Up: Some Old and New Lessons*?

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*Edited notes for the Matthews Lecture, September 14, 2012. A videotape of the lecture is available on the School's website.

I. Does the World Economy Qualify as a Mess?

A starting point is to test whether the world economy is indeed messed up. If one's universe does not extend beyond the Canadian boundaries, then things do not look so bad. The Canadian economy has been growing around a 2 per cent pace and most forecasters expect it to maintain that rhythm through 2013. That is around the potential growth rate for the Canadian economy. The Canadian unemployment rate is 7.3 per cent. That's below the average of 7.8 per cent since 1966 and the average of 8.0 per cent over the past 20 years. Commodity prices are off their peaks, but still relatively firm. The Bank of Canada commodity price index is higher than its pre-recession value other than for the period February to September 2008. Canada is one of the few developed countries to avoid a meltdown in housing prices. Yet. So in terms of the economic variables that likely matter most to people – employment and home equity – the Canadian economy isn't performing badly at all.

Two perspectives that might challenge this complacent view on the Canadian economy are the expectation that Canada should be recovering at a pace well above potential as it pulls out of a deep recession and the troubles in other economies.

Many forecasters, including the Bank of Canada, have been slow to recognize that Canada's potential economic growth rate is as low as 2 per cent, and perhaps even lower. Over the next decade Canada's labour force growth will not likely exceed around ¾ of a per cent per annum. And that assumes Canada continues to accept large numbers of immigrants, the female labour force participation rate continues to rise and older male workers continue to drive up their participation. Over the past decade, labour productivity has been growing less than one per cent per annum on average. That should hopefully rise given the incentives to invest provided by the dramatic declines in rates of taxation of capital and the outburst of public infrastructure spending in recent years. Still, getting to a 2 per cent potential growth rate will require productivity to pick up to 1 ¼ per cent per annum and there is nothing guaranteed about achieving that.

Commentators and forecasters who express disappointment with a 2 per cent growth rate in Canada are hopefully no longer clinging to an unrealistic view of Canada's potential. Perhaps they thought Canada created a large output gap – the difference between the actual and potential level of output – during the recession and the Canadian economy, as has been the typical historical experience, should be closing that rather quickly with growth well above the potential growth rate. But first, as has been well documented by many, recoveries from recessions precipitated by financial crises tend to be long and slow. Second, there may not be large stocks of labour and capital available to readily and productivity re-engage in the economy. In other words, the practical output gap created during the recession may be rather small. This seems to be a view finally adopted by the Bank of Canada. For example, their recent estimates of the output gap are around 1 per cent whereas a straightforward difference between actual output and a potential growth rate of around 2 per cent would suggest a gap of at least 5 times that magnitude. The recession was characterized by a severe shock to the labour and capital of particular sectors, especially manufacturing, and the resources displaced may not come back to the economy, or at least not at the productivity levels achieved previously. In consideration of an output gap of only 1 per cent, then with potential of 2 per cent, one possible growth outcome is 2 years of 2.5 per cent growth and then a return to the potential growth path. But even getting to 2.5 per cent growth for a brief period may require more favourable international conditions than available.

The U.S. economy also appears stuck in a 2 per cent growth path, which is likely a bit below their potential rate. But their unemployment rate has remained above 8 per cent for 32 months, relative to a 20-year average of 6.0 per cent. So compared to Canada, the U.S. has continued to do better on the productivity front, but at a price of slow employment growth. And while the U.S. housing market has likely finally moved off its trough, prices remain depressed in most areas, so households have the double whammy of poor employment prospects and depressed home equity values.

If one broadens the gaze to the global economy, then on the surface things seem all right. The IMF expects the world economy to grow 3 ½ per cent in 2012 after 3.7 per cent last year. Those rates are in line with the average growth rate of the world economy since the data first became available in 1960. But trouble becomes apparent if one peers beneath the surface. The overall growth rate of the world economy is being propped up by around 5 ½ per cent growth of the emerging economies, which now account for more than half the global pie. The developed economies are in aggregate growing less than 2 per cent. Europe will likely record a slight recession this year with similar prospects for next year. Japan is not doing much better as it continues its growth malaise of the past 2 decades.

The picture becomes even more troubling if we look beyond growth rates to some economic fundamentals. Households in many countries are still overly burdened with debt despite some rise in savings rates. Income distributions are widening in many developed economies. At a minimum this is a big social and political problem. It may well have negative implications for overall economic performance. Most developed countries are now running huge fiscal deficits and debt loads and their desire to address these will comprise future growth. Financial markets remain unstable with inadequate capital in many instances, still excessive leverage and in many parts of the world restricted capital flows. The world economy still features a huge imbalance with an immense deficiency of savings in the United States, financed by capital from the surplus Asian economies. There has been some improvement, but one still must question how sustainable these imbalances are. And exchange rates are not moving freely to provide correction.

So yes, the world economy is in a mess. It just is not so evident from growth rates alone. And if growth remains the focal point of attention, then there will likely be more disappointment as it will take years to sort through the global imbalances and right the world's economic ship. Policy authorities can help the adjustment process. But only if they first understand the changes in the global economic context and then the lessons from the financial crisis and its aftermath.

II. Context for Understanding the Current Global Economic Mess

In order to understand what has happened in the world economy since 2008 one has to take note of a few remarkable changes over recent decades that have implications for economic performance and policy leading into, during and in the aftermath of the recession.

a) The composition of world output is dramatically shifting to the emerging economies. They now account for over half of world output (at PPP), up from one-third in the early 1980s. They will likely account for two-thirds well before 2030. One can no longer analyze world economic development by just looking at the developed economies.
b) The growth of the emerging economies with their low wages exported a disinflation force to the rest of the world. This is a major reason inflation remained low during the pre-recession economic expansion.
c) The balance of world savings has completely shifted since post-war when the U.S. was a net saver, dispensing capital to Europe and Asia. Now the U.S. is a huge dissaver, dependent upon capital from emerging economies, especially China.
d) Economies have become much more linked. Trade has been growing at double the pace of output for decades and the globalization of supply chains has made the transmission of shocks instantaneous. Financial products have also become globalized. For example, about one-quarter of U.S. mortgage securitizations were held outside the U.S. when the financial crisis hit. More than 90 per cent of the world's output is in economies where the central bank has a

formal or de facto inflation target and almost all the targets are around 2 per cent. The implicit synchronization of monetary policy around the globe has been a major factor tightening the synchronization of economic cycles. And now, particularly since 2009, fiscal policies have become more co-ordinated as the G20 and other bodies such as the OECD and IMF pushed their members to first stimulate their economies massively and then, with a neck-snapping twist, to apply fiscal austerity a few years later. The trade and financial product links and the co-ordination of macro-policies have meant that shocks and cycles in one part of the world get transmitted globally much more thoroughly and swiftly than in the past.

e) A rigidity in exchange rates through common currencies such as the euro or through exchange rate management as with some Asian economies, stifles a traditional mechanism for smoothing out imbalances across the globe.   The main impetus for correction of imbalances must come through differentials in growth rates, as has been happening in recent years with the surplus, emerging economies growing much faster than the deficit, developed economies. Yet even here the correction is limited because the surplus countries have not seen that much of a rise in consumption while the indebted, developed countries have been rather slow to cut back on their consumption. In countries with fixed exchange rates, such as in Europe with the euro, one of the fairly automatic means of stabilizing economic forces and re-distributing surpluses and deficits in savings has been taken off the table.
f) Global credit exploded. Just to cite one example, the global issuances of asset-backed securities increased 10 fold between 1995 and 2005.

In some respects, the greater economic globalization has made the world economy a more dangerous place because shocks get transmitted around the globe so much faster.   Some of the changes make the traditional macroeconomic policy tools more difficult to use.

The global disinflation force lowered inflation and interest rates and brought the zero interest rate bound into place much sooner than in the past. It also made longer-term interest rates respond differently to increases in short-term rates. This was former Federal Reserve Board Chairman Greenspan's frustration as he could not initially understand why hikes in short-term interest rates did not also bring about higher long-term rates.

As economies traded more, a larger percentage of domestic consumption was met through imports. The import leakage, ceteris paribus, lowered fiscal multipliers. Further, where and when exchange rates do not adjust fully one of the "safety values" for fiscal policy tightening is cut off. Canadians will well remember how the Canadian dollar nose-dived during the late 1990s, providing a cushion to the fiscal austerity delivered by all levels of government. The greater import leakage did not, however, take fiscal multipliers down to zero. Such allegations by some economists likely arise from a mis-reading of the inter-action of fiscal and monetary policy. If an economy is operating in equilibrium (with a zero output gap for example), then any attempt to fiscally stimulate or contract the economy will be met by an offsetting change in monetary conditions as the central bank tries to maintain economic equilibrium. A simple reading of the change (very little) in output in response to the fiscal policy shift could erroneously lead to a conclusion of fiscal impotence. But this does not imply anything about the power of fiscal policy if the monetary authority is not operating in a counter-fashion.

Finally, with the advent of international entities such as the G20, economies are now much less likely to be able to even be willing to follow a policy course on their own. It is important to note that when Canada introduced fiscal austerity in the mid-1990s, it was one of the few economies to be going in that direction at the time. The firm global economic conditions helped cushion the blow to the Canadian economy. Now almost all developed economies are trying to contract fiscally at the same time.

Another by-product of globalization will only be mentioned in passing. In theory and in the extreme, in a completely globalized economy there would be a single global wage rate, differentiated by work and by place only by deviations in productivity relative to the global norm. This is, naturally, an extreme observation because there are of course all kinds of impediments to the free flow of capital and labour in the world. But there is, nonetheless, a powerful equalizing force in place, nonetheless. Unless developed countries like Canada can maintain their productivity advantage – and Canada is rapidly losing its – there will be downward pressure on the wages of their workers. The opposite will occur for the low-cost emerging economies. In many respects this has been going on for some time. For example, despite a rise in labour productivity of 80 per cent in the United States between 1973 and 2011, median real wages have not risen at all. This speaks to both the competitive pressure on wages to compete with emerging economies as well as the greater ability of corporations to exploit the spoils from globalization. This wage compression seems to be building in Canada and may well be the most important economic and social challenge in the coming years.

III. How Did the World Economy Get Into this Mess?

Some of the changes in the world economy described above – such as growing dissaving in the Unites States – have been in process for a long time. Here we will focus only on fairly recent developments that sparked the 2009 world recession.

The recession was essentially caused by housing market bubbles bursting around much of the world and that triggering a collapse of a fragile financial system which had featured extraordinary liquidity, low interest rates, phenomenal leverage (especially in the U.S. and Europe) and an explosion of financial products (securitization of almost everything, collaterized debt obligations, commercial paper, money market funds, repurchase (repo) market, options, hedge funds) and dubious practices (financial institutions holding each others' securities, financial institutions making huge bets with each other, poor governance, incorrect incentives, rating agencies that gave triple A to CDOs that had sub-prime mortgages and other junk in them. There was a time many raved about financial innovations. However, we should note the famous observation by former Fed Chair Paul Volcker that the only positive financial innovation he had seen was the ATM. The financial scene featured a toxic mix in general of complex products with a lack of transparency. The decline in housing prices and squeeze on credit very quickly spread to the real economy in lost jobs and output.

IV. Who is to Blame for the Mess?

There is no shortage of culprits to blame for the global recession and its aftermath. Bankers who acted out of greed at worse and ignorance at best (note this does not much apply to Canadian bankers). Monetary authorities and financial sector regulators who focused on the wrong things. Credit rating agencies who gave top marks to debt products loaded with risk. Fiscal authorities who did not control debt burdens when times were good (Greece, Italy, Portugal and the U.S. for sure, but many others in deep fiscal trouble now are not so guilty of this – like Spain and Ireland). International agencies who failed to identify the building risk and consequently did not recommend appropriate action. Indeed, shortly before the crisis hit with full force the IMF noted the downside risk to their relatively rosy world economy outlook had diminished. Individuals who did not act responsibly on their own financial situation (taking on so much debt on a bet housing prices would forever rise). Economists who convinced themselves and many policy makers something like this could not happen again (as it did happen in the Great Depression, but we supposedly learned the lessons from that. But did we? Or maybe we just forgot them.)

IV. What Lessons Should We Draw from the Current Global Economic Mess?

Lesson One: Cycles Happen

The likelihood of economic cycles is merely the re-emergence of an old lesson. Many economists and policy makers had come to believe cycles had if not been eliminated at least dampened. But then we got a deep global recession. The belief in the end of cycles stemmed from the notion that markets are efficient and would self-regulate and individuals are economically rational. None of these proved to be valid through the late 2000s. Or at best, one could argue that people did not have the information required to act rationally. Many thought the explosion in global credit would be benign because with securitization the risk was dispersed more widely into the hands of those best able to handle it. This also proved false as the shock was largely systemic (i.e., all the pieces went down) and the lack of transparency and weak due diligence made very few capable of handling the risk. And on this front Canada was no exception. We had our own home-grown financial disaster in the $37 billion non-bank commercial paper market. It featured all the characteristics of what played out on the global scene, but with smaller magnitudes. For only marginally higher returns, institutions and individuals gobbled up the product despite knowing very little about what lay behind the paper. And a credit rating agency, in the face of this lack of transparency, gave a good rating.

Finally, there was a smugness about monetary policy that even if an economic cycle occurred, modest adjustments to monetary conditions would smoothen it out. But this time, inflation stability, the holy grail of monetary policy, did not ensure financial stability and the monetary authorities found they had to resort to desperate means to stabilize economies.

Lesson Two: One Target One Instrument Monetary Policy is Not Sufficient

Before, during and after the economic recession most monetary authorities were successful against their primary objective of ensuring inflation stability. But this definitely proved not to be sufficient to deliver financial stability. This does not necessarily mean that inflation stability is not a worthy cause. Indeed, it was a good thing the monetary authorities did not have an inflation problem on their hands, or they never would have had the necessary ability and credibility to slash interest rates close to zero and flood markets with liquidity. But other matters must be considered in the pursuit of financial stability. Such as factors that can lead to systemic risk. And the need for appropriate financial sector regulation.

In particular, financial sector regulation must pay more attention to macro-prudential factors such as the amount of credit and loan-to-value ratios. And attention must be paid to the shadow banking system in its own right and its relationship to other parts of the financial system.

The notion of waiting for bubbles to burst and then cleaning up must be re-evaluated. It has become no easier to predict when a bubble will burst (we have been guessing at this with the housing market in Canada for several years). But the cost of the clean-up from the recent global financial crisis has proven extraordinary.

The monetary authorities around the world will end up with additional powers from the recent experience. But they will also have additional baggage as the close relationship to the political and fiscal authorities through the crisis might make it difficult to return to a state of high independence. Finally, the experience might increase the attractiveness of price level targeting, although adoption still seems unlikely because it would be difficult to maintain credibility running inflation above a target simply because it had previously been below target.

Lesson Three: The Lower Bound of Interest Rates is More Problematic Than Thought

As inflation had not been a problem prior to the recession interest rates were at modest levels in most countries. Therefore, when the authorities aggressively lowered short-term rates, it did not take long before the zero bound was reached. Having run out of room through conventional monetary approaches, the authorities had to resort to other means such as bond and asset purchases and interventions into expectations through future rate “conditional guarantees”. These extraordinary measures are not without blemishes, however. They risk the balance sheets of the monetary authorities and raise inflation pressures if they are not withdrawn when appropriate.

The sustained period of very low interest rates is beginning to take a toll. It makes it very hard for defined benefit pension plans to remain solvent. They will have to take on more risk in a quest for return and will likely have to raise premiums and/or cut benefits. Savers are being penalized through rates of return that are often negative in real, after-tax terms. And borrowers are encouraged to go further in debt. Indeed, it is almost hypocritical for central bankers to preach borrowing restraint when their policies provide such an incentive for the opposite behaviour. At some point the benefits of extreme monetary stimulus may not meet these growing costs.

Lesson Four: Still a Need for Stabilizing Fiscal Policy

By the mid-2000s many had come to believe monetary policy should be assigned to stabilization and fiscal policy to longer-term goals. But it was judged by 2009 that monetary stimulus would not be sufficient to break the economic decline. So we also witnessed extraordinary fiscal stimulus pretty much across the globe. While the assertion that fiscal multipliers were zero was undoubtedly a false reading by failing to understand the role of monetary policy with an inflation target, some practical steps were taken to maximize the fiscal multipliers. Such as focusing on infrastructure and employment insurance provisions where international leakages would be lower. So pro-active fiscal policy stabilization lives again. And once again it is already proving to be in good part de-stabilizing as most countries have already turned to fiscal austerity even though their economies are still relatively weak.

As would be expected, the ability to apply pro-active fiscal policy depends upon the starting conditions. Countries such as Greece, Italy, Portugal and the United States were prime examples of jurisdictions that were in serious fiscal imbalance before their economies turned down. This should have contained their enthusiasm for applying more fiscal stimulus but often didn't. Now they must deal with even larger fiscal imbalances.

The jury is still out on whether once brought back to life, the fiscal beast can be corralled again. Consider the IMF recommendation the developed economies return to a 60 per cent debt-to-GDP ratio by 2030. This will require running surpluses of almost 4 per cent of GDP (that is an annual surplus of over $600 billion in the United States) throughout the entire decade of the 2020s.

Or is Paul Krugman right that deficits and debt do not matter much? It seems a risky proposition to hang onto forever. What if the emerging economies cannot or do not want to buy U.S. treasuries forever in the face of the likelihood of a falling U.S. dollar. Can the dissaving in the developed and in particular the U.S., economies be sustainable?

At this point we need to bring monetary and fiscal policy together. The global recession was so deep both were required to stimulate economies. In this case they worked in a complementary fashion. There is also an important lesson for monetary unions that was once understood but since forgotten. Especially in the absence of any mechanism to redistribute savings surpluses, a monetary union requires some sort of fiscal union – in order to reduce the size of potential imbalances. This was recognized when the euro block was created but allowed to slip as time passed. Recall the initial conditions to join the block were deficits below 3 per cent of GDP and debt burdens under 60 per cent of GDP.

Lesson Five: Need to Focus on Growth and Not Just Fiscal Imbalances

There are presently sharply differing opinions on the appropriate fiscal course in developed countries. Many argue indebted countries have to apply stringent austerity now and for the foreseeable future. Others, like Krugman, say while the economies are still weak, forget deficits and debt and massively stimulate. Of course, those in the latter camp, and Krugman is a prime example, do not think debt matters much ever.

The answer probably lies somewhere between the fiscal hawks and doves. Those in the austerity camp have to be more mindful of the current conditions – everyone applying austerity together, few being able to use exchange rate depreciation as a safety value, little scope for substantial, further monetary accommodation. Austerity could just cause an implosion of output and jobs. Justas surely a country has to be careful about its debt burden over time. It impinges its ability to act when required. It transfers ownership of capital to foreigners.

Meanwhile the structural agenda for growth cannot be forgotten in the avalanche of short-term concerns. Fiscal policy in particular cannot become go-go-stop. That ruins the growth agenda. It likely ruins social equity as well. Avoiding this pattern requires getting the debt burden down when economic times are good and not just slashing and burning when times turn bad. This was the primary focus of the Commission on Ontario Public Services. It did not look so much at the fiscal problem now to 2017 as what is required for growth and positive social outcomes over the longer-term.

The dangers of focusing too extensively on fiscal austerity are readily apparent in Europe at this time. Countries such as Greece, Spain and Italy do not have ready safety valves to protect their economies from the demand-reducing fiscal tightening. They are locked in a common currency. Policy interest rates are beyond their control and at close to zero at any rate. The economies they trade with are relatively weak. Each round of austerity weakens demand which lowers revenues which throws out a missed deficit and debt target. The vicious circle repeats if the only response is to tighten fiscal policy further. Hopefully sooner than later policy authorities throughout the region and in the international agencies will recognize this will not get them out of their box. Unless they leave the currency union, someone will have to provide them with further financial support. Increasingly that someone is Germany. And therein lies another potential roadblock – how long can one economy be expected to support a continent, especially when those receiving the support do not seem to be particularly grateful?

Lesson Six: Moral Hazard Will Always Be Trampled on For Some Perceived Greater Common Good

Policy authorities always wring their hands over moral hazard but, in the end, it is almost always cast aside. The U.S. authorities were reluctant to help homeowners who got themselves into mortgage difficulty. Instead they bailed out the banks which had caused much of the problem, only to see many of them return to their former practices and pay out large bonuses to boot. In Europe part of the reluctance to provide the inevitably required support to the southern fiscal basket cases is the fear of rewarding their fiscal excesses. But they will eventually see the inevitability. Coming out of the financial crisis is a rush to define banks that are "too big to fail" and have institutions prepare "living wills". There is a danger that bad behaviour of a big bank will be accepted because allowing it to go under hurts too many interests.

Lesson Seven: Public Policy Needs a Longer-term Horizon that Recognizes Global Realities

This economic cycle has dragged policy into a myopic perspective on the here and now. This is understandable. But lamentable. It exaggerates a fundamental flaw policy already had of always looking for the quick fox, the quick pay-off and rarely looking beyond the election cycle. Monetary policy has to get more involved in financial stability through new means but simultaneously find ways of keeping its eye on the longer-term. The fiscal authorities will need to be involved in stabilization but should not forget their main job is longer-term objectives. So for example, in the United States it isn't just a matter of trimming its deficit. It must reform its health and pension systems to mention just 2 challenges as both are inadequate and inefficient. The details of fiscal policy matter.

There should be a concern whether any country or collection of countries has the right governance (political economy) to pull off such a longer-term focus. Individual countries will have to be more cognizant of what is going on in the global economy as this could bolster or compromise their domestic interests. The world needs more effective institutions and mechanisms to co-ordinate policy. But this leads to a lot of political economy questions. To what degree should individual countries, mostly with democratically elected governments, cede policy authority to what will likely be a non-elected global body? And who is to say this global body will actually make things better? When every country did their own thing, some might have gotten it right and offset the harm from those that got it wrong. What if an international body gets everybody going off in the wrong direction? The record of the international bodies to date does not instill a lot of confidence for a stronger role.

Lesson Eight: Economists (and Macro policy Makers) have to Go Back to the Drawing Board

A starting point is to re-evaluate the notions that economic agents are rational and hence markets will self-regulate. Macroeconomics has to import finance, capital and the price of assets better. Models cannot simply assume the financial system will always be there and functioning. There must be further contemplation of economic agents' behaviour during periods of distress.

It is telling to observe that the financial variables represented in many models used for economic forecasting and policy do not contain any of the variables – such as risk, capital adequacy, leverage et cetera – that brought the global economy to its knees. Rather, conventional models still in active use often only contain interest and exchange rates. These were the culprits this time around.

Lessons Nine: Recognize When You Have Been Lucky

This is aimed at a smugness in Canada. How many times have we heard Canadian representatives brag about how we came through the recession better than most due to an alleged superiority of our economic policies and institutions? There is something to this. We had solid monetary policy with a clear framework. We had competent financial sector regulation. We have generally risk adverse bankers. Our fiscal debt burdens were lower than in most other developed countries.

Still, Canadians did not have that much better understanding of the new financial sector risk than others. Canadian households now have as high a debt burden relative to income as the Americans did at the time the recession struck. And the American burden has since been falling whereas the best that can be said in Canada is that the burden is rising less rapidly. As discussed before, we had our own made-in-Canada $37 billion financial crisis with non-bank commercial paper. And nobody is quite sure why so far, we are one of the few countries to avoid the bursting of a housing bubble. In fact, we are so unsure about this that many think the bursting is still to come. Most troubling, Government policy played a role in raising housing market pressures through a series of steps in the 2000s to ease mortgage conditions. Fortunately, the Government has since come to its senses. But the recent tightening, while necessary, of course now becomes another ingredient in a potentially unstable housing market.

In all, it is time for Canadians to act, not gloat. We need better education on the financial sector and risk in universities, in government and within institutions. Hopefully the new Global Risk Institute will play a strong role in this. We need to remain vigilant over the housing market. In the rush to a return to fiscal balance we should not compromise longer-term objectives. It must not just be slash and burn. We need to sort out the appropriate governance structures for dealing with macroprudential risk and then develop the tools to deal with it.

Lesson Ten: Policymakers Have to Have Broad Perspectives

Everyone involved in policy needs to have an understanding of economics – if only to protect the world from those who think they do understand. Micro-policy objectives can be easily undermined by macro-policy blunders. We see this every time the economy goes through a cycle.

Just as economics and finance have to be brought closer together. So too do economics and policy. It is unfortunate that over recent decades the two have drifted apart in many universities.

V. Conclusions

This rough economic experience is not over yet. Inflation will likely return to target in Canada and elsewhere and interest rates will be cut – but not very much. But longer-term growth may be modest. Weak productivity is a major culprit in Canada. The world is turning more protectionist. There is a movement toward re-shoring rather than trading. Private and public debt burdens many economies, leading to lower growth and an unacceptable burden on the young.

The view circa 2006 that economies would not be subject to highly disruptive shocks has been disproved and must be disavowed. There will be future shocks and policy makers have to get better at handling them.

TO BE INSERTED APRIL 16, 2023 BUDGET

Notes used for talks in East Asia 2015, Don Drummond

1. Qualify as a mess

- Clear during the Great Recession

- Some but not enough worried about a mess before things struck in 2008 (current account imbalances, housing excesses, high leverage ratios)

- Indeed, a smug complacency pre-2008 individuals and hence institutions act in best interest (support for financial sector de-regulation, cycles would not be severe if inflation kept under control and monetary policy could easily correct, fiscal policy not needed for stabilization but long-term objectives)

- Japan was worrying and had been since 1990 but the game was to think of reasons why that was a “special case”

- What about now

- The worst seems over but

- Slow growth in most of AEs (U.S. and U.K. few places going anywhere). U.S. economy seems back on its feet, but it took a long time to get growth going, it never was very robust (suggesting lower potential and the output gap was never that large). And at best its just the end of Act One. Now they have to address the massive amount of monetary and fiscal leveraging. Most likely both will be a very slow process. The Fed’s balance sheet, now four times GDP, may never return to pre-crisis levels.

- Reduction in current account imbalances U.S., China and Japan but stocks even worse

- Failure to get traction in many AEs principally in Europe and increasingly difficult to see how they get out of the hole – told to implement fiscal austerity but with fixed exchange rate and wage rigidity there is no escape value – self-implode. Stimulate but that just creates internal imbalances.

- Slowing but still solid growth in EEs

- But worrying signs – large credit expansions, fiscal imbalances, especially off budget and especially at local/provincial levels, some over capacity related to credit expansion

- Growth in many of the EEs is not the same as it was pre-2008 when it was based on strong AEs, opening of trade, productivity convergence et cetera

- Now increasingly based on credit expansion, expansionary fiscal policy (especially off budget and local) and in case of China through investment which could lead to over capacity and seeing some of the pre-2008 excesses in construction

- So, some EES including china showing same worrying signs as AEs pre-2008

- Financial institutions in many countries still not adequately capitalized and some still have dubious assets

- Thing that should be most worrying is that we have 6 years experience now showing its not easy to get out of problems.

- Japan does not look like such a special case any more

- Fiscal policy can be expansionary for only a short period

- Monetary policy easing has been extraordinary but not getting the job done

- Structural reforms continue to be difficult to implement with uncertain impacts

So YES. We should still be very worried. Still a mess I would say. Perhaps should be even more worried than we were during the Great Recession because we now know how difficult it would be to correct another global shock. Nothing left in the arsenal.

2. Step back and understand context

- Change in composition of world output (1/3 to ½ to 2/3)

- Disinflation and fear of deflation replaces fears of inflation in many countries

- Some troubling demonstrations of individual and institutional behavior (U.S. sub-prime mortgages – individuals, mortgage issuers, investors)

- Economies more linked – global cycle much more synchronized (trade, financial products, monetary policy, fiscal policy) no natural offset like early 1990s, early 2000s AEs recessions or late 1990s Asian crisis

- Exchange rates there in theory for adjustment but tend to be rigid – played little role in lessening of current account imbalances for example. Most of that gave from differentiated growth rates. Europe the ultimate example and removes one of the adjustment mechanisms.

- Global credit expansion global issuances of asset-backed securities increased 10 fold 1995 – 2005. Sources of growth has since shifted but still a lot of credit and a lot of debt.

Lessons

1. Economists (and Macro policy Makers) have to go back to the drawing board. Maybe everyone is not so rational. Maybe there is a case for smart regulation, especially financial markets

2. Cycles Happen, they can be deep and they can be extraordinarily difficult to correct

3. One target one instrument monetary policy is not enough. No doubt keeping low, stable inflation is a good thing but its not sufficient to keep economies stable. Credit expansion, loan-to-value ratios. Most models in 2008 did not even have the financial variables that caused the big problem.

4. The lower bound of interest rates is more problematic than thought. The policy is near zero interest rates is not costless. Stimulating debt build-up. Hammering savers.

5. Still a need for stabilizing fiscal policy but it is of limited use for a large and enduring shock

6. Need to focus on growth and not just fiscal imbalances. Especially with sticky exchange rates fiscal austerity can just implode the economy. Needs to be measured.

7. Have to recognize that potential growth rates are likely lower than thought (Recession lowered them, demographics, lack of productivity boost, some of the major reforms happened a while ago). Perhaps number one danger is creating or exacerbating imbalances by trying to achieve growth rates that are not solid/sustainable. Potential in Japan. Europe. U.S./Canada. China. Mongolia.

8. Must be more vigilant and likely proactive against imbalances/bubbles because we know now the costs are large, enduring and the problems cannot be fixed easily

9. More representative governance if we are going to have global policy co-ordination. Good on the G20 but is it even – IMF, OECD et cetera.

Where does this all leave us.

We should not be very relieved 6 years after the onset of the Great Recession.

Some of the old problems remain.

New ones are creeping up.

Worst of all, our faith in some of the old recipes should be shaken.

And we have not really learned new, good recipes.

Keeping working on the macro imbalances.

Head off the emerging imbalances.

Introduce structural reforms (look at the Canadian case, NZ case – do we understand them well enough?)

Lots of work for economists.

Lots of work for policy makers.

More progress needed in AEs, especially those with large debt imbalances such as U.S. and many parts of Europe.

Need for emerging economies such as China to smoothly moderate growth. In the drive to strong but more moderate yet sustainable growth, a number of policy elements will be needed. Reining in credit growth which in turn will require more use of interest rates (and higher rates), accounting improvements at local level of government (consolidating off-budget borrowing) and reining in those deficits, capital account liberalization, removal of trade restrictions (tariff and non-tariff such as border d reining in those deficits, capital account liberalization, removal of trade restrictions (tariff and non-tariff such as border congestion – which specialized trade deals can compromise, removal of subsidies for construction et cetera.

Rolling the Dice on Canada's Economic and Fiscal Future

https://www.cdhowe.org/public-policy-research/rolling-dice-canadas-fiscal-future

See Don Drummond, G&M, February 20, 2024

https://www.theglobeandmail.com/business/commentary/article-must-canada-leave-a-mountain-of-debt-to-future-generations/

The 2023 fall economic statement projected large deficits through 2028-29 and a net debt-to-GDP ratio that rises in 2024-25 and then declines only slightly, remaining well above the pre-pandemic level through 2028-29. Interest payments eat up almost 14 per cent of revenue. The 2024 budget must correct this imprudent treatment of risk.

Debt's risk is lost opportunity. When servicing costs rise, more tax dollars have to go toward financing the debt, leaving less room for more meaningful expenditure.

The federal government justified the deficits and debt by showing the net debt-to-GDP ratio declining through 2055-56. This is not credible.

First, high debt produces economic costs, even if sustainable under the narrow definition of a declining ratio of debt-to-GDP. Second, the assumptions of the debt's sustainability are dubious; without corrective action, it is quite likely the debt burden will rise.

Aggregate demand and supply are roughly balanced so there is no economic justification for continuing deficits. They add inflation pressures and undermine the Bank of Canada's efforts to return inflation to its 2-per-cent target. All public debt, large or small, must be financed. It competes against private business investment for the pool of available saving, pushes up interest rates, and crowds out investment, long one of the softest spots in the Canadian economy.

If businesses borrow abroad there is a cost as debt-servicing payments are made to foreign bondholders, lowering the incomes of Canadians. Today's fiscal imbalances threaten higher future taxes, which would not only lower after-tax incomes but cause further damage through the economic distortions they inflict. High interest payments siphon off money that could be used for current public services, investments for the future or tax relief.

The high debt creates an unfair intergenerational transfer of resources away from today's young people and future generations who, in addition to carrying their inherited burden of today's fiscal excesses, will likely need to apply all their resources to cope with their adaptation to and mitigation of climate change.

The government's depiction of a declining net debt-to-GDP ratio over the long term rests on three dubious assumptions.

First, debt-servicing costs will be manageable because the effective interest rate will be below the nominal growth rate of the economy. History shows this has been the exception rather than the rule. The assumption defies logic. If a loan were offered at a rate below the expected return (the nominal economic growth rate can be thought of as a proxy), the borrower would try to access as much money as possible, thereby putting upward pressure on the rate.

Second, the current government's fiscal management defies the assumption that program spending will decline relative to GDP. Program spending was 13.2 per cent of GDP in 2015-16 and is projected in the fall economic statement to be 15.3 per cent in 2028-29.

Third, that there will be no significant economic disturbances ahead; shocks with lingering effects keep coming. We have had the 2008 financial crisis with ensuing recession, the pandemic, the outbreak of inflation and a sharp increase in interest rates, and an increasing number and severity of climate shocks, not to mention meeting our international commitments on defence spending, serious and fast-increasing problems of Canada's health care "system," and coping with population aging that will slow economic growth while adding to spending pressures.

An alternative scenario with the effective interest rate equal to nominal economic growth, program spending-to-GDP ratio remaining flat and economic shocks and government responses consistent with the record over the past 60 years, indicates a 50-per-cent probability of a rising net debt-to-GDP ratio.

The planning the Government of Canada is now doing for its 2024 budget must recognize the risks inherent in the status quo outlook presented in the 2023 fall economic statement. The risks are too high. It is not acceptable to continue to run deficits and carry a high debt burden that may or may not decline relative to GDP.

History proves that budget planning should not be based on the assumption everything will turn out favourably. Climate change and public-health threats and the uncertainties of our contemporary world suggest that, if anything, we should be preparing for more shocks in future. Young Canadians cannot be left to deal with and pay the costs of today’s errors. Correction of those errors must begin now.

MPA 887 Reform of Public Services

Summer 2024

Budget Planning and Fiscal Policy in Crises

1. Context and Selective History

Since WWII, we have had several severe economic cycles. But these should not be classified as "crises". They can, and to a degree were, addressed through fairly conventional budget and fiscal policy tools and procedures.

The first true crisis was the financial shock of 2008. The second of course is COVID-19.

The fiscal stimulus following the financial crisis amounted to 3.9% of OECD area-wide GDP.

To put that in the current Canadian context, nominal GDP in Canada is current dollars is almost $3 trillion so 3.9 % would be $117 billion. This is greater than the stimulus Canada actually provided. But less than is being spent to react to COVID-19.

We discussed how stabilization policy falls more heavily on central governments than sub-national governments. The same tends to be true for crises. Nonetheless, crises have important impacts on sub-national governments and their responses also have important implications nationally.

Sub-national governments can: try to mitigate the impact of the crisis (usually leading to still larger hits on deficits and debt); just let the automatic stabilizers operate so that the deficit and debt rise but not by as much as if discretionary policy were implemented, or; try to reduce the hit of the crisis on deficits and debt in which case they would typically be pro-cyclical.

Historically and across countries, most sub-national governments attempt to mitigate the effects of crises, but to a lesser magnitude than the central governments and they typically react more slowly (follow, not lead). In part, the lesser reaction at the sub-national level is due to: imposed or super-imposed budget rules; difficulty accessing credit markets and; fiscal leakages.

U.S. sub-national governments tend to be pro-cyclical. Canadian sub-national governments tend to be counter-cyclical, but to a lesser extent than the federal government.

Part of the response of central governments is typically to provide additional fiscal support to sub-national governments in times of crises. This happened in both Canada and the United States when COVID-19 hit.

Therefore, we will focus our attention on central government responses to crises.

Early and substantial fiscal responses to crisis often involve accelerating infrastructure projects that were (more slowly) in the works. In the case of Canada, this had the twist of accelerating and increasing support for infrastructure plans involving the provinces and territories.

Why? Can get the money out the door quickly (they were already planned). Infrastructure has high labour content. It has high domestic content, so low leakage through imports.

Fiscal responses to crises tend to be oriented toward increased spending rather than tax cuts. Countries that cut taxes tended to focus on relief for lower-income households (most worried about their suffering and most likely to find a high marginal propensity to spend there).

Why? With the right kind of spending, typically fewer lags. And the propensity to spend is typically higher (100 per cent of spending flows into economy; some portion of tax relief could be saved).

The financial crisis brought about extraordinary financial/monetary policy responses as well. But the need for expansionary fiscal policy was enhanced because financial markets were compromised and the drive to zero interest rates was expected to have a reduced effect (liquidity trap/pushing on a string).

Challenge: difficulty in recognizing a crisis and hence slowness to respond to it.

This was very evident with the 2008 financial crisis. The toxic build-up of sub-prime mortgage debt in the U.S., as an example, was building for years without much of a policy response. There was a naïve belief that if inflation remained under control (and it was), the economy would remain relatively stable.

Even through the failure of Lehman Brothers there was a failure to recognize this as a crisis.

We see the same thing with COVID-19. Initial reluctance in many countries to accept and react to the health threat and in turn to recognize the need for economic intervention.

By the time the crisis is fully recognized, it is too late for highly effective policy intervention.

The history of the two crisis (financial and COVID-19) demonstrates a downside of Canada being an open economy. Canada did not really do anything “wrong” in either case. But our economy was hammered. In a way it does not matter that we were not “blameless” (did not have sub-prime mortgages, did not syndicate mortgage debt, had well-capitalized banks, were not a source of the coronavirus…). We “imported” the problem and had to deal with it.

Policy authorities finally got it and then reacted quickly through fiscal and monetary policy.

Challenge: Deferring or even abandoning pre-crisis objectives

Example: Canadian Conservative Government was bent on demonstrating fiscal discipline and balanced budgets. Reluctant to move off this track even as the financial crisis hit.

Example: Trump Administration dedicated to shoring up 2020 election prospects through a strong economy; reluctant to do anything that might weaken the economy.

Challenge: Policy procedures are typically slow and cumbersome

Governments have demonstrated that when they feel the need to move quickly, they can and do act quickly. Fairly quick off the mark **once** the 2008 financial crisis was recognized. Fairly quick off the mark **once** the seriousness of the pandemic threat was recognized (although initial stumbles – failure of U.S. small business loan program; initial offer of a meagre 10 per cent wage subsidy in Canada).

Lesson: Even if crisis last a fairly short time (recession in Canada timed from November 2008 to May 2009) the policy implications ensure for years.

U.S. has still not righted the fiscal hit.

It took years in Canada to return to a balanced budget.

Monetary policy in Canada, the United States and most other countries was still out of "equilibrium" in early 2020, 12 years after the financial crisis.

The 2023 Fall Economic Statement in Canada projected large deficits through 2028-29 and a debt-to-GDP ratio still far above the pre-pandemic level.

Working Paper from the Federal Reserve Bank of San Francisco examined

historical outbreaks beginning with the Black Death of 1347 and ranging up to more recent disasters, such as the Spanish flu of 1918, the Hong Kong flu of 1968 and H1N1 pandemic of 2009.

In the wake of these pandemics, interest rates typically fell about 1.5 percentage points below where they otherwise would have been expected without the disruption.

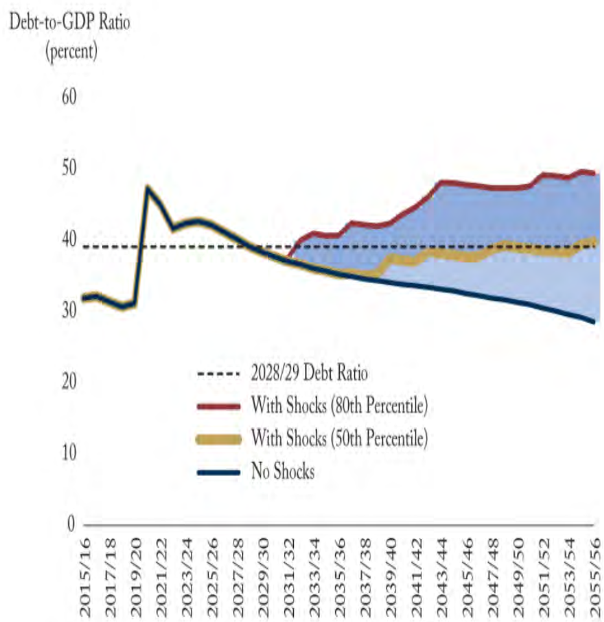
It required as much as 40 years for interest rates to return to trend.

Lester and Laurin, C.D. Howe Institute

There is a non-negligible risk that the debt ratio will start its upward trend earlier and will rise well above its 2028/29 value. There is a 20 percent probability that the debt ratio will be above its 2028/29 value by 2032/33 and that the debt ratio will rise about 10 percentage points above its starting level by the end of the projection period. (The red line in Figure 2, which represents the scenario on the 80th percentile of the simulations.)

https://www.cdhowe.org/intelligence-memos/lester-laurin-federal-debt-not-sustainable

Figure 2: Alternative Projections of Debt Ratio with Economic Downturns



For Canada's debt to be considered sustainable with high probability in the IMF classification scheme, the red line in the above figure must remain below the debt ratio in

MPA 887

Education

Summer 2024

Don Drummond

Some Themes

Why education

Overall assessment of Education in Canada is pretty good

Highest proportion of population (within OECD) in some form of Post-Secondary Education

Some suggest too many people go to PSE BUT…

Some Supply-Demand imbalances

Some concerns with quality

Classroom size very controversial

Suggestions by employers (and students to a degree) that universities are not preparing graduates for the world of work

Growing emphasis on classes of skills and how universities focus on just some

Need to better account (and change) university performance

A lot of Canadians have a shockingly low level of literacy.

High Rate of Return from Early Childhood Education

Reference Material: Universities and the New World of Work

https://www.schoolofpublicpolicy.sk.ca/research/publications/policy-brief/universities-and-the-new-world-of-work-a-strong-relationship-with-room-for-improvement.php

Early Childhood Education and Care (OECD)

https://www.oecd.org/education/school/earlychildhoodeducationandcare.htm

1. **Why Education**?

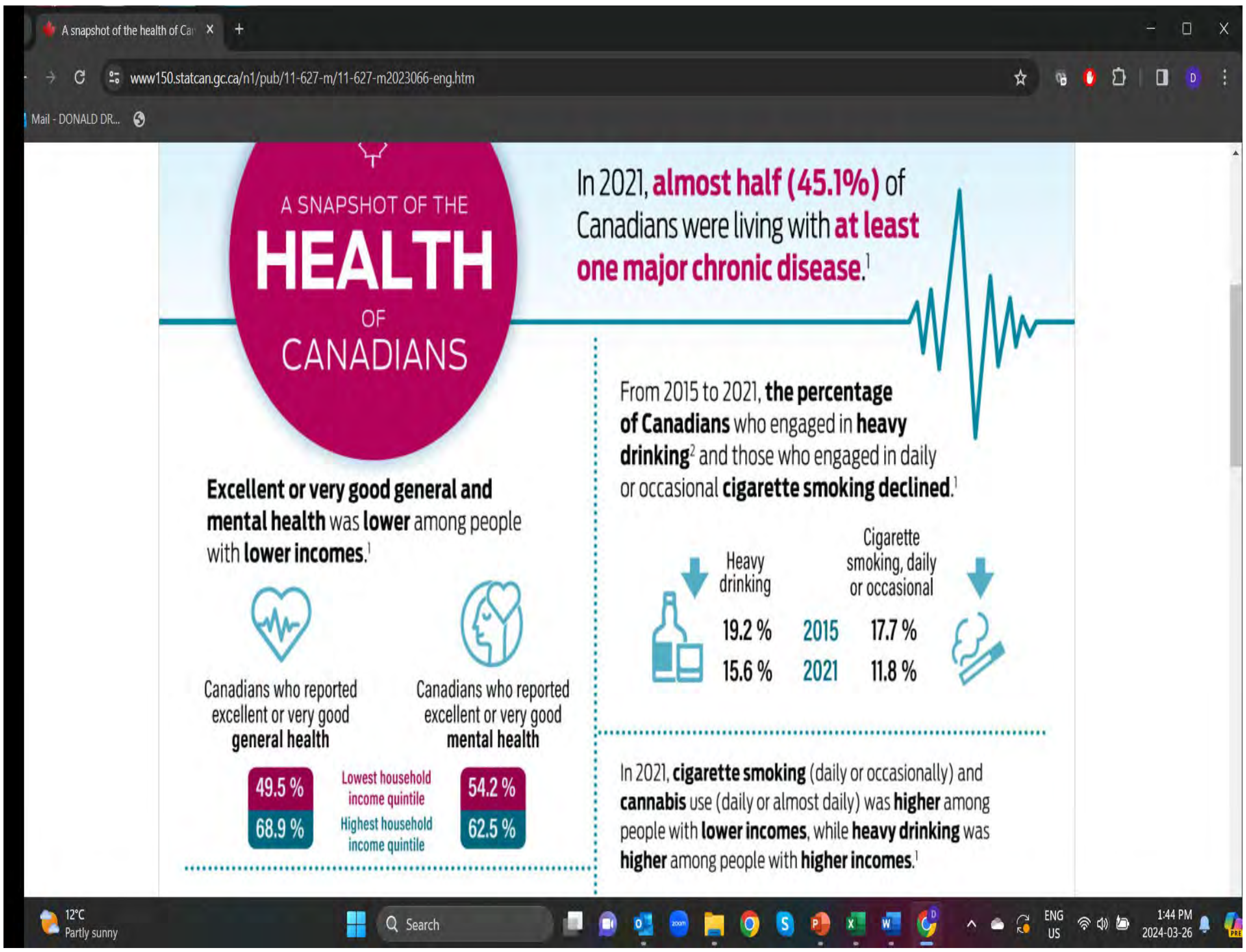
Personal satisfaction (consumption element, more interesting work)

Intergenerational benefits

Economic – private rates of return

Social – public rates of return (externalities) (stronger economy, civic participation)

Health – better education improves health outcomes



79 % of Canadians in correctional facilities do not have high school.

65 % have less than Grade 8 literacy

2. **Overall assessment of Education in Canada is pretty good**.

PISA scores good, but not the best in the world.

For 2022 test, Canada was 8th after Singapore, Macau, Taiwan, Japan, South Korea and Hong Kong. The United States was 18th.

Canadian students scored above the OECD average for reading, mathematics and science.

Scores for all 3 categories have been on a downward trend since Canada started participation in 2000.

In Canada socio-economically advantaged students (the top 25% in terms of socio-economic status) outperformed disadvantaged students (the bottom 25%) by 76 score points in mathematics. This is smaller than the average difference between the two groups (93 score points) across OECD countries.

Socio-economic status was a predictor of performance in mathematics in all PISA participating countries and economies. It accounted for 10% of the variation in mathematics performance in PISA 2022 in Canada (compared to 15% on average across OECD countries).

Boys outperformed girls in mathematics by 12 score points; girls outperformed boys in reading by 24 score points in Canada

Canada

Student performance (PISA 2018)

- **Socio-economic status explains 7% of the variance in reading performance** in Canada (OECD average: 12%).
- **The average difference between advantaged and disadvantaged students in reading is 68 points**, compared to an average of 89 in OECD countries. However, **14% of disadvantaged students are academically resilient (OECD average: 11%).**

OECD estimates adding 25 points to results (which would put Canada in first place except in mathematics) would add $4 trillion (US) to Canada's cumulative GDP over 80 years.

OECD PISA predictor model features:

- Making teaching prestigious and selective
- Directing more resources to neediest students
- High quality pre-schools
- Adopting a culture of constant improvement and standards

High school drop-out rate has fallen.

In 2020, 84 percent of Canadians had graduated from high school on time, 89 percent graduated over an extended time.

But completion of upper secondary school is just below the OECD average and well below the rate of some countries.

https://www150.statcan.gc.ca/n1/pub/81-604-x/2017001/hl-fs-eng.htm and is well below OECD

Canada's upper secondary graduation rate was 87% in 2015. The OECD average was 86%, and most OECD countries reported graduation rates of at least 80%. Within the OECD, Finland and Japan had the highest graduation rates at 99% and 98% respectively. The upper secondary graduation rate corresponds to the probability that an individual will graduate from high school during his or her lifetime.

A survey by Pathways to Education highlights the socio-economic context of high school graduation.

Pathways says young Canadians who are living in poverty often face significant barriers to education that limit their chances of graduating high school, which affects low-income areas where the number of residents ages 20-24 who don't graduate from high school is double or triple the national average.

In some communities, this number may be as high as 50 per cent of residents.

3. **Highest portion of population (within OECD countries) in some form of post-secondary education**

University participation middle of the pack

Canadian colleges rather unique

4. Some suggest too many people go to pse BUT:

Private (internal) rates of return remain high

Women		Men		
BA	College	BA	College	Trades
17	11	13	11	9

Have decline somewhat for women but not for men (supply effects alone could reduce returns).

Percentage Earnings Premium Over High School

	Female	Male
Trades	-2	12
College	19	17
Bachelors	60	45

Some returns are negative:

- Women in trades (personal services, cooking…)
- For some humanities

Historically we have had poor evidence of university graduates' earnings (National Graduates Survey every 5 years, voluntary Ontario and B.C. surveys). Better information emerging from tracking students over time by the Education Policy Research Initiative (EPRI) and the Labour Market Information Council (LMIC).

https://lmic-cimt.ca/wp-content/uploads/2020/02/LMIC_How-Much-Do-They-Make-Research-Report.pdf

Earnings vary by credential, but for all 2010 PSE graduates, real earnings grew from $43,100 to $59,300, an increase of 8.4% per year (38% in total) from 2011 to 2015.

Five years after gradation, earnings vary widely by field of study within credentials, with the top fields earning between 40% and 60% more than graduates from fields with the lowest earnings. On average, graduates in Architecture, engineering and related technologies earn the most among college-level certificate, college-level diploma and bachelor's degree students five years after graduation (respectively, $60,500, $64,500 and $80,400). Among master's and doctoral graduates, those from Business, management and public administration earn the most ($103,800 and $123,600, respectively). At the other end of the spectrum, graduates in the Humanities with college level certificates and diplomas and doctoral degrees, and graduates in Visual and performing arts, and communication technologies with bachelor's and master's degrees earn the least. These graduates earn between 43% less ($27,500) for college-level diplomas and 61% less ($62,800) for master's degrees than those from the highest earning fields of study.

In every field of study, women earn less than their male counterparts five years after graduating and in the vast majority of cases average gender earnings differences increase from year one to year five.

International students who stay and work in Canada earn less than their Canadian counterparts, but the differences narrow over time.

5. **Some supply-demand imbalances**
    - Was a surplus for many years in teachers
    - Many claim STEM graduates in short supply. But not across all fields and must explain why, on average, female STEM graduates are not doing well in the labour market
    - Universities and students are responding: significant shift in enrollment to business and STEM fields away from humanities et cetera (see Reference: Universities and the New World of Work)

6. **Some concerns with quality**
    - High "run rate" for pse cost increases (4-6 per cent per annum to stand still)
    - Transition to larger classrooms (need for …learning but goes against)
    - Do universities train for the "right" things that will improve success in the labour market and provide a platform for lifelong learning? Or does discipline knowledge dominate?

7. **Classroom size very controversial**
    - Huge controversy not backed by evidence of material difference to learning
    - http://post.queensu.ca/~lehrers/csize.pdf
    - Lehrer and Ding find
    - We find substantial heterogeneity in these impacts in the cognitive subject areas as students with higher test scores receive larger impacts from small classes. Third, using statistical corrections for multiple inference, we do not find any evidence in Kindergarten for additional benefits 16 from CSR for minority or disadvantaged students. It may well be that CSR are more effective for some groups of students defined by alternative criteria in which case policy might be more effective targeting specific populations rather than mandating across the board reductions. Finally, we find mixed evidence on the effectiveness of CSR in kindergarten as it leads to significant improvement in cognitive achievement measures but does not appear to provide substantial benefits to the development of non-cognitive skills.

- Makes the useful point one needs to look at who benefits (poor stay poor, rich get rich) and how they benefit (cognitive but perhaps not non-cognitive)
- And forces a look at general approaches (reduce class size for everyone) and targeted approaches (Heckman's point about adding resources to the "neediest")

8. Suggestions by employers (and students to a degree) that universities are not preparing graduates for the world of work

- Yet on balance employers are satisfied with new hires
- Student returns remain good
- Some evidence that earnings converge across disciplines over time
- Employers say they prize higher-order cognitive and "soft skills" more than discipline knowledge. Don't universities focus on the last and not the first two?

9. **Growing emphasis on classes of skills and how universities focus on just some**:

Discipline Knowledge	Solve equations	Know concepts		
Basic cognitive skills	Literacy	Numeracy		
Higher order cognitive	Problem solving	Critical thinking	Communication	
Personality (soft) skills	Persistence	Initiative	Determination	Attitude

10. Need to better account (and change) university performance

- Not related to funding (which is tracked)
- Access Value to Students Value to Society
- Ontario has signaled it will shift much of university funding to performance based. But what performance indicators? Watch out for a focus on short-term employment results. May not be the best indicator over time.

11. A lot of Canadians have a shockingly low level of literacy.

https://www150.statcan.gc.ca/n1/pub/89-555-x/89-555-x2013001-eng.htm

https://outlook.office.com/mail/search/id/AAQkADZmOWI5NGRiLTRmZTktNDg1Zi1iZTBkLWM3NDQxOGViZWUwNwAQABYUk3GuagFJlHrRPWUcHo8%3D/sxs/AAMkADZmOWI5NGRiLTRmZTktNDg1Zi1iZTBkLWM3NDQxOGViZWUwNwBGAAAAAAASxoya1RhWRryjrawPf5QyBwCHDlx3%2BxopQq5gzqN98GfVAAAAdbC6AACuYR01ftO0S6qmnqgK%2Bnz4AARc%2FmncAAABEgAQAEw0jqvCxABLimF7k4O4%2F6A%3D

Executive Summary

This report presents the first results of the Programme for the International Assessment of Adult Competencies (PIAAC), an initiative of OECD. PIAAC provides internationally comparable measures of three skills that are essential to processing information: literacy, numeracy, and problem solving in technology-rich environments (referred to as PS-TRE).

The report provides information about the literacy, numeracy, and PS-TRE skills for the Canadian population aged 16 to 65. It provides results for Canada as a whole, as well as for all the provinces and territories. In addition, it looks at the relationships between skills proficiency and a range of socio-demographic characteristics (e.g., age, gender, level of education) across the entire Canadian population. It also reports on first results on the literacy, numeracy, and PS-TRE skills of Aboriginal populations, immigrants, and official-language minority communities.

Key Findings

Canada in the International Context

- Literacy— Canada ranks at the OECD average in literacy. However, Canada shows a larger proportion of its population at both the highest and lowest levels of literacy.
- Numeracy — Canada ranks below the OECD average in numeracy, and the proportion of Canadians at the lower level is greater than the OECD average.
- PS-TRE — Canada ranks above the OECD average in PS-TRE. Only Sweden exceeds Canada in the proportion of its population at the highest level of proficiency.
- A higher proportion of Canadians engage with information and computer technologies than the OECD average.

Skill Levels and Distributions within Canada

- There are notable variations in scores across provinces and territories, in all three domains.
- Literacy and numeracy scores are highest at ages 25 to 34, and are lower among the older age groups.
- Individuals aged 16 to 34 are found to be the most proficient, in PS-TRE. Despite higher levels of proficiency in PS-TRE among youth (16 to 24), 9% display proficiency at the lowest level in PS-TRE.
- Men have higher numeracy skills than women across the entire PIAAC age spectrum, while, in general, both genders display similar proficiencies in literacy and in PS-TRE.
- Higher education is associated with greater literacy, numeracy and PS-TRE skills, particularly for those with postsecondary education (PSE) – bachelor’s degree or higher.

- Proficiencies in information-processing skills of adults with PSE - below a bachelor's degree are below those of adults with PSE – bachelor's degree or higher, and more similar to those of adults with a high school diploma.
- The employed population displays greater information-processing skills than the unemployed and not in the labour force populations.
- Literacy and numeracy skills of unemployed and not in the labour force populations are similar. However, not being in the labour force is associated with lower PS-TRE skills compared to the unemployed population.
- Higher education and working in managerial and professional occupations attenuate the difference in information-processing skills between younger and older age groups. This is especially true among individuals with PSE – bachelor's degree or higher.
- While workers in managerial and professional occupations display greater information-processing skills than workers in all other types of occupations, workers with the greatest information processing skills are those in managerial and professional occupations who also have PSE – bachelor's degree or higher.
- On average, initial results indicate that information-processing skills of Aboriginal populations, immigrants, and official-language minority populations vary considerably across provinces and territories and across skills being measured. These results warrant further research that would shed light on how skills vary in relation to other socio-demographic characteristics in these populations.
- A snapshot of literacy and numeracy skills in 2003 and 2012 shows differences in scores and proficiency levels. In 2012, a lower proportion of Canadians are at Level 4 or 5 and a higher proportion at Level 1 or below.
- https://outlook.office.com/mail/search/id/AAQkADZmOWI5NGRiLTRmZTktNDg1Zi1iZTBkLWM3NDQxOGViZWUwNwAQABYUk3GuagFJlHrRPWUcHo8%3D/sxs/AAMkADZmOWI5NGRiLTRmZTktNDg1Zi1iZTBkLWM3NDQxOGViZWUwNwBGAAAAAAASxoya1RhWRryjrawPf5QyBwCHDlx3%2BxopQq5gzqN98GfVAAAAdbC6AACuYR01ftO0S6qmnqgK%2Bnz4AARc%2FmncAAABEgAQAEw0jqvCxABLimF7k4O4%2F6A%3D

Based on results of the International Adult Literacy and Skills Survey (IALSS), almost half (42%) of all "working-age" adults (16–65) have low literacy skills. The proportion of low-skilled adults grows to 47% when seniors aged 66 and over are included. These figures have not changed over the last decade. Canada's low and stagnant rates of literacy are detrimental to Canadians' health and well-being. Low-skilled seniors are exposed to dangers because they cannot understand medical advice or safety instructions. Low-skilled employees are limited in terms of career mobility.

Large estimates economic benefits (internal and social) to improving literacy.

https://outlook.office.com/mail/search/id/AAQkADZmOWI5NGRiLTRmZTktNDg1Zi1iZTBkLWM3NDQxOGViZWUwNwAQABYUk3GuagFJlHrRPWUcHo8%3D/sxs/AAMkADZmOWI5NGRiLTRmZTktNDg1Zi1iZTBkLWM3NDQxOGViZWUwNwBGAAAAAAASxoya1RhWRryjrawPf5QyBwCHDlx3%2BxopQq5gzqN98GfVAAAAdbC6AACuYR01ftO0S6qmnqgK%2Bnz4AARc%2FmncAAABEgAQAJpiQZ%2FiUoJKi580xYrQaZQ%3D

The second approach to estimating the likely economic benefits of raising all Canadian adults to prose literacy level 3 involves applying Coulombe and Tremblay's estimates of the long-term relationship between average literacy scores and the growth of GDP per capita (Coulombe and Tremblay, 2005). This analysis identifies two significant economic effects of literacy:

• A level effect in which a 1% increase in average literacy scores results in a 1.5% permanent increase in GDP per capita.

• A distributional effect in which higher proportions of Level 1 adults appear to limit growth to a considerable extent.

12. High Rate of Return from Early Childhood Education

James J. Heckman is a leading authority in early childhood education.

He draws 3 lessons. https://heckmanequation.org/resource/the-case-for-investing-in-disadvantaged-young-children/

- Develop the whole child (PISA and the like ignore noncognitive factors such as social, physical and emotional, that promote success in school and life
- Inequalities open up early in life – gaps at age 5 predict future education performance
- Early intervention is far more effective than later remediation

The vulnerable youth are concentrated in low income but not restricted to them.

Early childhood education programs compensate for difficult home and community environments.

Heckman estimates a 7:1 pay-off to early childhood education investments

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April 22, 2019

Universities and the New World of Work: A Strong Relationship with Room for Improvement

Introduction

There is considerable debate over the contribution of universities to the new world of work which is generally characterized as precarious and volatile with generally increasing skill requirements. There are many stories of university graduates being either unemployed or not working to their potential. Yet the imperfect evidence that is available indicates that on average graduates do well in the workplace.

As the Canadian economy settles into a lower growth path, held back by mediocre productivity, there is growing focus on the labour market. With 1.7 million students, that focus quickly turns to universities as they will provide a large portion of the future labour force growth, outstripping the contribution from immigration. The increased focus is being accompanied by efforts by employers, governments, students and analysts to improve what is already a strong relationship between universities and the modern workplace. Still, there is much room for further improvement.

A feature of the new world of work is the requirement for a broader range of skills or competencies. Discipline-specific knowledge is still necessary. But it is no longer sufficient. As work changes rapidly within firms and within occupations and industries and as workers increasingly have multiple careers, the so-called "soft" or "transferable" skills, such as teamwork, resilience, persistence, flexibility/adaptability and socio-emotional competencies, are drawing a premium.

Some universities are embracing the need to develop broad competencies in their students. By establishing learning outcomes above and beyond discipline-specific knowledge, they are trying to move beyond a quantitative perspective on education such as counting degrees to a qualitative dimension where a key quality is how well a university education serves individual and society well-being over the longer-term. Such a focus is not the traditional domain of university teaching and learning. Shifting further to the sort of competency-based approach employers seem to be asking for would amount to a revolution on campus. It would be a revolution requiring innovative approaches because some of the effects of constrained budgets, such as larger classrooms, on their own compromise the ability to develop and measure competencies.

This note analyzes the current relationship between universities and the workplace. It describes efforts being applied by employers, governments, universities and students to improve the relationship. Finally, it advances proposals for each stakeholder to make further improvements in the relationship. The goals of such improvement would be a stronger economy, more equal income distribution and better life well-being for graduates and Canadian society.

I. Timely increase in attention to the links from universities to the workplace as critical for economic growth, income distribution and well-being

Canada has long suffered anemic productivity relative to other countries along with unequal income distribution. If recent trends in Canadian productivity continue, Canada will likely experience future output growth of only about 1 ½ per cent per annum. Among other challenges, this will make it difficult to fund health care for an ageing population.

In the quest to understand Canada's poor productivity performance a lot of attention has been paid to factors such as capital, innovation and trade. Only recently has focus increased on the labour market and in particular on skills and skill matching.

The increased attention to labour markets is evidenced in the work of the Organization for Economic Co-operation and Development. In a seminal 2015 manifesto the OECD concludes "there is much scope to boost productivity and reduce inequality simply by more effectively allocating human talent to jobs" (OECD. The Future of Productivity. 2015).

The OECD's work highlights why addressing Canada's poor productivity record is so important. The 2015 study found Canada's labour utilization (work effort) exceeded the average in the upper half of OECD countries, but its level of labour productivity was more than 20 per cent below the average. With respect to the United States, Canada's labour productivity was more than 25 per cent below.

With standard estimates that at least two-thirds of new jobs in the near future will require some form of post-secondary education, the increasing focus on labour markets has naturally turned a spotlight on the links between universities and the workplace. The sheer number of university students in Canada, 1.7 million including full-time, part-time and continuing education, supports that attention. Further, between March 2008 and March 2017, 3 times as many new jobs were created for university graduates than graduates of all other types of post-secondary education combined (Universities Canada. Facts and stats).

The spotlight on the links from universities to the workplace has not, however, been as focused as it should have been due to poor data and misplaced emphasis on the quantity rather than the quality of education from the perspective of preparation for the workplace. Fortunately, improvements are being made.

I. The links from universities to the workplace work much better than suggested by some anecdotal evidence

Universities are often criticized for producing graduates who struggle in the labour market. The criticism is often encapsulated in simple characterizations such as graduates working as baristas. Hopefully no disrespect for baristas is intended. The point in the criticism is that university graduates are not realizing their income potential nor putting to use their full range of skills.

We suffer from poor data to track what happens to university graduates in terms of employment and income. However, the data available do not support the more extreme and pessimistic versions of how graduates are faring in the workplace.

Standard evidence cited of failure of graduates to get jobs is the high youth unemployment rate. In March 2019 the youth unemployment rate in Canada was 10.7 per cent. While still high at almost double the overall unemployment rate, it is has come down significantly in recent years. But note that it is a very blunt, and largely inappropriate, measure to gauge what is happening with university graduates. First, it covers ages 15-24 so many of the youth in the measure are too young to have graduated. Second, it covers youth at all levels of education, not just university. Third, the measure includes full-time students. Not to dismiss problems that may be faced if full-time students cannot find work, but they are often seeking limited hours, yet the unemployment rate statistics give this the same weight as would be attached to a non-student seeking full-time employment (a problem that arises because our labour statistics give little emphasis to hours worked).

Another standard marker used to claim university graduates are not faring well in the labour market is estimates of “over qualification”. In the OECD’s 2015 study, they measure the labour market demand-supply imbalance as the sum of the percentage of workers who perceive they are under-skilled and over-skilled for their jobs. Of the 22 OECD countries studied, Canada had the second lowest level of skills mismatch and the fourth lowest level of over-qualified workers. So, Canada looks rather good on this relative basis.

Yet Statistics Canada’s absolute measures of over qualification for university graduates paint some grim pictures. Across all fields of study, for 2016 Statistics Canada finds 17.4 per cent overqualified. Over qualification is quite low for some fields such as nursing, engineering, mathematics and computer and information service. It is over 25 per cent for arts and humanities and social and behavioural sciences.

The OECD and Statistics Canada are to be congratulated for putting attention on skill mismatching. But the measures seem crude and perhaps unhelpful, particularly when it comes to “over qualification.”

One possible reaction to estimates of over qualification would be to reduce the flow of university graduates. That would be most unfortunate. Such a reaction could only be justified by a flawed concept that output and production processes in Canada are fixed. But output is not fixed in a small, open economy. Production processes are not fixed either. Bright, educated people do not need to work only in the field they studied. They and employers can branch out, particularly if transferable skills have been developed.

A preferable reaction would be for employers to better use the superior education of the population to raise output, employment and incomes. Markets can be expanded in other countries. Imports can be displaced. Production processes can be made more efficient by bright, educated people.

Another possible reaction is to dramatically change the mix of what university students study and learn to better match the revealed demand of employers. As is discussed below, such a process is underway within universities. However, we should note that over qualification may possibly indicate employers are applying too narrow a mindset on who they hire. Are they stuck in a mode of seeking only employees with fairly direct education and training in the type of work the company does? This would seem to defy the growing evidence that all businesses and occupations can productively tap into good employees from a variety of backgrounds. It also seems inconsistent with evidence revealed of late that employers seek a variety of skills in recruits, going far beyond discipline-specific knowledge. Over qualification may also reveal a tendency for students to focus job search in areas naturally associated with their studies. Particularly if they have developed transferable skills, their horizons could and should be cast much more broadly.

At worst, "over qualification" should be considered as a possible sign of poor job-matching. It is not a problem of itself. With better information on the labour market, students would likely make more rational choices of fields of study and job searches. Job matching could also be improved through better recruitment and labour use practices of employers.

Related to the concept of over qualification is the measure of university graduates not working in jobs fairly directly related to their field of study. Implicit in the notion is the graduates were not able to find work in an area they are best suited for by nature of their university program. Going one step further, the measure is taken as a failure of university education or at least of the link between universities and the workplace. The measure no doubt does reflect the inability of graduates to find work in areas that might seem a natural fit following their studies. But it may also reflect different and changing interests. The underlying presumption is that knowledge specific to a university discipline is what is important for jobs that seem to be related. But as discussed throughout this report, it is increasingly being recognized that all workplaces benefit from a broad array of skills or competencies. There is nothing necessarily wrong, and there are likely many benefits, of a graduate taking their competencies to a wide variety of types of work. A straight line between university discipline and specific jobs does not fit with the modern workplace.

While imperfect, the evidence available shows that university graduates on average are doing quite well in the workplace. The National Graduate Survey provides some, albeit flawed, information on how graduates are doing. At this time, we only have a glimpse of the 2010 graduating class in the workplace of 2013. Further, a lot of the aggregations in the data make no sense, such as combining business and public administration, two very different disciplines with differing job markets. We also get a glimpse for one year only in the labour market from voluntary surveys of graduates in British Columbia and Ontario. In addition to the limitation of only profiling one year, the fact the surveys are voluntary means the samples shift and may well be skewed. Nevertheless, the 3 surveys listed above do in general show that university graduates do well in the labour market in terms of employment and income. They do quite a bit better than cohorts without university degrees, including those with college diplomas.

The Education Policy Research Initiative (EPRI) provides a useful longer-term perspective on how graduates are doing. They linked administrative data on students from 14 post-secondary institutions to tax records to track the labour market outcomes of Canadian diploma and bachelor's graduates from 2005 to 2013. There are significant differences across fields of study. Engineers, for example, did best. But graduates of all disciplines did quite well. The EPRI highlighted the earnings for humanities graduates as humanities are often cited as a discipline not in sync with labor demands. While humanities graduates do earn less than graduates in most other fields, their incomes did start at

$32,800 and rise to $57,000. The EPRI makes the point baristas do not come even close to that. The result that “even general arts and science graduates do relatively well in the labour market” led the EPRI to conclude that graduates “have skills that are valued by employers”. (Ross Finnie, “Busting the barista myth – higher education IS linked to higher salaries, Ottawa Citizen, August 8, 2016)

The 2016 Census in Canada demonstrated once again the powerful effect of education on income and income inequality. For women, the premium earned with a Bachelor’s degree was 58 per cent over high school and 40.6 per cent over college. The premia for men were 47.2 and 20.8 per cent respectively. So, we can see that education not only lifts incomes, but addresses to some degree inequality for women as their education premia are higher than for men. The same can be said for inequality in incomes by province as the largest premia occur in provinces with below average incomes.

The OECD estimates strong internal (i.e., the return to the individual for their investment in their education in terms of time and money) and social (i.e., the return to social for the public investment) rates of return for tertiary education (somewhat broader than universities to include some vocational programs). The private rates of return are 13 per cent for men and 17 per cent for women in 2015. The respective social rates of return are 8 and 7 per cent. Again, according to the OECD, the employment rate for 25–64-year-olds in 2017 across all levels of education was 77 per cent but 83 for those with a Bachelor’s degree and 85 per cent with a Masters.

Beginning in 2013 the organization now known as the Business Council of Canada has conducted surveys of member companies about reactions to recruitment and recruits. In the 2013 survey, two-thirds of employers said they were very satisfied or satisfied with new recruits from university and one-fifth said they were neutral, leaving few dissatisfied.

Some popular beliefs about the links from universities to the workplace do not stand up to evidence. One notion is that far more university students should be in the STEM disciplines (science, technology, engineering and mathematics). This notion often correlates with the suggestion the displacement should be from humanities and other social sciences. Yet, as discussed above, graduates of the humanities fare reasonably well, on average in the workplace. We discuss below some of the competencies employers say they seek. Many of them flow from liberal arts studies. So again, the question arises of whether employers are too focused on the disciplines students studied rather than their broader skills or competencies. At the other end, there is not compelling evidence suggesting many more students should be in the STEM disciplines.

The message must be much more nuanced than a generic shift to STEM studies. Not all STEM disciplines are producing graduates with strong employment and income records. STEM graduates in many disciplines do not do well in the workplace. In the National Graduate Survey of the 2010 graduating class, graduates did not do well income-wise in computer science, mathematics and computer science and computer and information sciences and support services, general. Earnings for men were well below the all industry average in all 3 categories. In general, women in STEM do not do particularly well in the labour market. One explanation is that women tend to study different fields of STEM than men, the former more likely to be in biological sciences, the latter in engineering, computer and information services. As well, men are almost twice as likely to be working in STEM if they graduated in STEM. The factors holding women back need to be better understood before assertions are made many more women should enter these disciplines. Some of the issues may be inherent within universities; other may stem for the workplace.

The Canadian Council of Academics (David A. Dodge, Some Assembly Required: STEM Skills and Canada's Economic Productivity. 2015) investigated the frequently heard position that Canada needs a lot more STEM students in order to drive innovation and productivity growth. Instead, their analysis led them to conclude that working smarter relied more broadly on "problem solving, technological proficiency, and numeracy" and these traits could and should be reflected across all disciplines. In other words, there should be some STEM in everyone, but not necessarily only STEM.

This section concentrates on the role of universities in teaching. However, it should also be noted that almost half of all research and development in Canada comes from universities. This is a much larger relative contribution than in most other countries. That research no doubt has a fundamental influence on the economy and the world of work.

The rapid increase in university enrolment over the past few decades may have been expected to diminish somewhat the return to education through the simple dynamics of supply and demand. However, there is some evidence this has not occurred. Statistics Canada (M. Frenette, "Are the Career Prospects of Postsecondary Education Graduates Improving". Statistics Canada. 2019.) took post-secondary graduates who were 26 to 35 years old in 1991 and tracked them from 1991 to 2005. The results were compared to the same exercise for a similarly aged 2001 cohort, which was followed from 2001 to 2015. Median cumulative earnings were higher for members of the 2001 cohort and this result was found for males and females and across all major disciplines.

II. Several forces are improving the links from universities to the workplace

i) University enrolment is shifting toward disciplines thought to be best aligned with the workplace

We do not wish to fall prey to a simplistic notion that some disciplines are inherently inferior in being suited to the workplace because, as discussed below, broader skills or competencies may be more important than discipline-specific knowledge. We will, however, note a combination of students' revealed preference and perhaps emphasis and resource allocation by universities is creating profound shifts in student enrolment by discipline. In general, enrolment is shifting toward those disciplines where employment and income returns to graduates have been above average and away from those where workplace outcomes have been inferior.

The table below shows the change in enrolment by discipline over a recent 4-year period.

Changes in the Percentage of University Students by Discipline 2012/13 to 2016/17

(Source: Statistics Canada)

Percentage Points

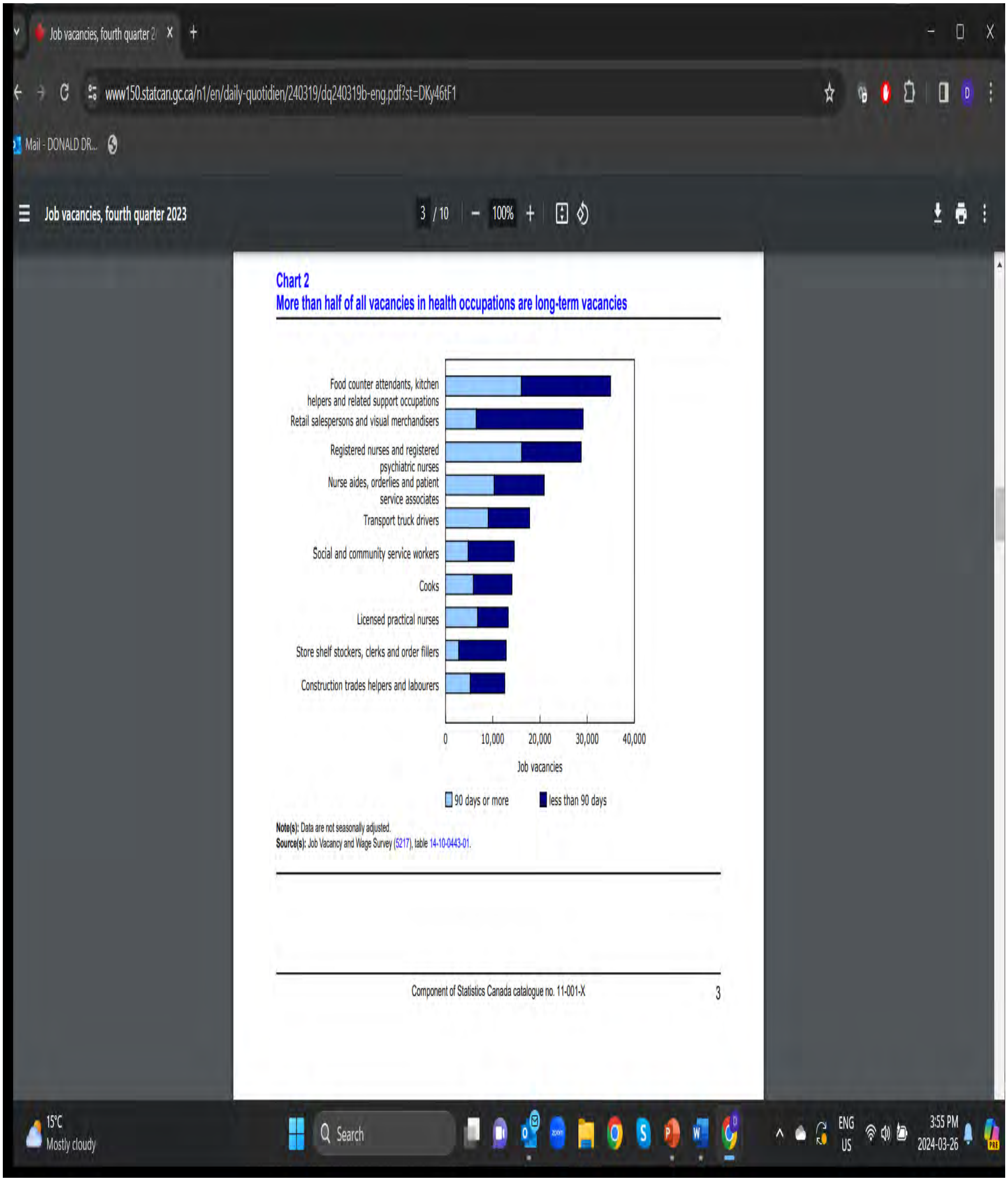
Increases in Share of Enrollment

Mathematics, computer and information sciences	+3.2 (2.7 to 5.9 % of all students)
Business, management and public administration	+1.3
Architecture, engineering and related technologies	+1.3
Health and related fields	+1.3
Physical and life sciences and technologies	+0.9
Social and behavioural sciences and law	-+0.6

Decreases in Share of Enrollment

Humanities	-5.8 (16.4 to 10.6 %)
Education	-0.4
Visual and performing arts, communications technologies	-0.4
Social and behavioural sciences and law	-0.3

Many of the occupations with high job vacancy rates do not require post-secondary education. But in the health domain, the vacancy rate is relatively high and about half of the vacancies are long-term in that the positions have been vacant for more than 90 days.



ii) Students are getting more work experience before graduating

There has been a growing awareness that one of the most effective ways to prepare youth for the modern world of work is by promoting Work Integrated Learning. Fortunately, this growing awareness has been accompanied by a growing availability of such learning opportunities.

The 2019 federal budget embraced the objective of the Business/Higher Education Roundtable (BHER) by declaring that "within 10 years, the Government will strive to ensure that every young Canadian who wants a work–integrated learning opportunity should get one." The Budget made substantial investments toward this goal in preparing students for the workplace. That includes:

- An additional $631.2 million over five years to expand the existing Student Work Placement Program to all students, regardless of discipline
- A new investment of $150 million over four years, starting in 2020, to create partnerships with innovative businesses; and
- $17 million to support the Business/Higher Education Roundtable to convene partners such as businesses, post-secondary institutions, not-for-profits and other levels of government. This will also include funding for a platform to better connect students, schools and employers.

Provincial Governments are also supporting work experiences for students. Ontario's Career Ready Fund is an example.

Much work remains to fulfill the Business-Higher Education Roundtable's plan that all students interested should have a work-integrated learning experience. Employers will certainly need to provide more positions. But the combined efforts of universities, employers, students and Governments appear to have the plan on a good course.

iii) Employers are giving more thought to what they seek in recruits and skills requirements

Several years ago, what is now known as the Business Council of Canada found an environment of "a lack of comprehensive labour market data, particularly on employment trends and skill requirements" (Business Council of Canada, Developing Canada's future workforce: a survey of large private-sector employers, March 2016). A study commissioned from the Canada West Foundation noted that Canada was behind most other industrialized countries in setting out skill requirements for jobs, in particular the "suite" of skills sought.

In an effort to identify if not partially fill the information void, the BCC embarked upon a series of surveys of its members (Canada's largest 150 companies). Highlights of the findings are:

- Employers are particularly interested in recruiting and developing employees with "soft skills" such as collaboration and teamwork, communication skills, problem-solving skills and people and relationship-building skills
- At the other extreme, technology literacy ranked second-to-last as the most important skill sought
- Post-secondary graduates are adequately prepared to enter the workforce
- Companies are generally satisfied with their recruits from universities
- Most companies believe they are well-prepared for demographic shifts including the retirement of baby boomers

A key, overall message from the BCC survey is that companies are focused on competencies of their employees as opposed to simply having a narrower perspective on discipline-specific knowledge.

iv) Labour market data are improving

Beginning in 2011, Statistics Canada added a job vacancy survey which is a key piece for understanding mismatches between labour demand and supply. The survey has since been improved, such as with the addition of identification of vacancies that have remained for a considerable time. Such information gives insight into where there may be a persistent need for an increased labour supply and that, in turn, could suggest where universities and students could channel attention.

Hopefully we will soon have results from the Education and Labour Market Longitudinal Linkage Platform (ELMLP). This will link data on apprenticeships, the post-secondary education information system and tax records. This should extend the valuable but more piecemeal longer-term workplace results of graduates reported by the EPRI.

The Statistics Canada study of 1991 and 2001 graduates referenced above demonstrates the power of the increased ability to link data sets by linking census and tax data to assess outcomes of graduate cohorts from different time periods.

The Forum of Labour Market Ministers has created a Labour Market Information (LMI) Council. It will identify priorities for the collection, analysis, and distribution of LMI. The Advisory Panel on Labour Market Information (Don Drummond, Chair, Advisory Panel on Labour Market Information, 2009) identified serious deficiencies in each of these areas a decade ago. Little remedial action was taken until recently. Hopefully the LMI Council will go a long way to close the information gaps students, employers, policy makers and others need to make wise decisions concerning the labour market.

v) The federal government is showing greater interest in labour market issues

The federal government's interest in experiential learning was noted above. Another sign of interest in labour market matters is the establishment of a Future Skills Centre. It will operate at arm's length from the Government of Canada to fund projects that develop, test and measure new approaches to skills assessment and development. It will also make recommendations to the Minister of Employment and Social Development Canada on skills development and training. This will complement efforts by many provincial and territorial governments.

vi) There is a growing movement to analyze what a university program should deliver

Many individuals and organizations of late are giving thought to what a university degree should deliver to the individual and society. The Higher Education Quality Council of Ontario (HEQCO) and EPRI are among the important players in this field. These efforts offer the prospect to improving the matching of labour demand and supply and in particular closing gaps to what employers are seeking in employees.

The focus of the movement is that a university education should be much more than just a tick beside the degree earned. It should also be much more than discipline-specific knowledge. In part this reflects the reality that such knowledge may not remain relevant for long as disciplines change, work within any sector, industry or occupation changes and graduates switch jobs and even careers.

The starting point for analyzing what the university experience should produce is to define the objective. This is pretty much the same starting point for any policy issue. As Yogi Berra is quoted: "you've got to be very careful if you don't know where you are going because you might not get there."

University education should have several objectives with respect to the individual student and to society. Lifetime well-being of the student should be a goal. This goal is much more stringent than job success in the first few years after graduation. First, well-being is a much more comprehensive measure than employment and income. Health, concern for the environment, civic duty and many other attributes have been shown to play into well-being. Fortunately, research suggests these are well correlated with education. Second, maximizing outcomes in the near-term is likely easier than positively influencing results over a life. Moreover, different approaches are likely required. For example, near-term results may be maximized by focusing on current labour market needs. Longer-term success likely requires an emphasis on adaptability and flexibility and in general, learning how to learn and then learn all over again as things change.

University education should raise well-being of all citizens, not just those who undertake the studies. This social aspect includes higher output and incomes. In turn this requires universities to produce the graduates that will facilitate success of Canadian firms, domestically and globally. Drilling down one step further, that means meeting the skill requirements of employers. Again, this does not just mean meeting the demands of today. Employers and universities must resist the temptation to focus attention and resources rather exclusively to the needs that are apparent at a given time. They will change. Students must be equipped with the skills to adapt.

The social perspective on higher education should go beyond employment, income and output to include the broader benefits of a more informed, engaged society.

This perspective on the objective of university education puts the focus squarely on outcomes. This contrasts with the current focus largely on inputs such as degrees and dollars spent. A focus on outcomes also permits an assessment of efficiency within universities, something that cannot be properly measures with a pre-occupation with inputs.

The next step is to understand the context from which the objectives must be pursued. That begins by accepting what is not possible. In particular:

1. We cannot accurately predict what jobs there will be in the future and what requirements they will have. It may be possible to develop ideas about broad trends. But these trends could be well off as they are by necessity largely dependent upon the past and that may not accurately represent the future. The only thing we can be fairly certain will carry over from the past and present is that the workplace has been precarious and volatile and will remain so.
2. There will never be a tight relationship between what is taught and learned in university and what is required on the job. The relationship may stand to some degree for a while. But it will surely breakdown in short order and eventually could become unrecognizable.

Accepting what is not possible means the focus of university education must change from being inordinately on the near-term, which might tend to lead to education and training in specific skills of today, to a focus on preparing students to best adapt over the longer-term. This flows from that familiar theme that today’s graduates may well change careers five to seven times over their lifetime. Of critical importance is what skills are transferable across all that change? What facilitates the required adaptability and growth?

HEQCO has usefully organized learning outcomes into four classes: basic cognitive skills (numeracy and literacy), discipline-specific skills (specialized knowledge and skills), higher-order cognitive skills (communication and critical thinking) and transferable skills (teamwork, initiative and resilience).

As research and the literature have built in recent years, one finds other descriptions of skills, sometimes indicating something a bit different than set out by HEQCO, sometimes seemingly describing the same things in different words. The additions are often to the category HEQCO identifies as "transferable" but referred to by others as "soft skills", denoting a distinction in particular from discipline-specific knowledge. Some of the terms used are: persistence, determination, conscientious, strong work ethic, self-confidence, leadership, interpersonal skills, flexibility/adaptability, detail-oriented, social-emotional skills.

Among corollaries to the "hard skills" is analytical skills and problem solving.

One can relate this considerable inventory of skill requirements back to the findings of the Business Council of Canada survey results. At a broad level, it can be concluded that the employer surveys identified interest in many of the same things with a particular emphasis on cognitive and transferable or soft skills.

There is a debate over whether university graduates have these skills, either inherently or as a result of their studies. As noted above, about two-thirds of BCC employers are very satisfied or satisfied with recent recruits, most of whom are university graduates. While that does not seem bad, it does suggest there is room for improvement from the perspective of employers.

HEQCO tested 7500 students at 20 colleges and universities on competencies such as literacy, numeracy and critical thinking. The results were not impressive to say the least with one-quarter in the bottom 2 of 5 levels, for example. Worse, there was not much improvement in aggregate scores over the course of post-secondary programs.

HEQCO then examined students' perceptions of their skills. Survey responses suggested that students perceived a gap between the skills they thought would be needed for their future careers and the skills they were developing while in university or college. The largest gaps identified were in business etiquette, leadership, teamwork and creative/innovative thinking skills. Focus group participants affirmed the perception of a gap between skill levels resulting from postsecondary education and skill levels required for successful employment. Encouragingly, survey respondents and focus group participants indicated an openness to strengthening the skills perceived to be lacking (D. Lanarcic Biss and J. Pichette "Minding the Gap? Ontario Postsecondary Students' Perceptions on the State of Their Skills". Toronto: Higher Education Quality Council of Ontario. 2018).

Some universities are already expanding the scope of education to teach and measure a broader set of competencies than historically associated with discipline-centered learning. Only two examples will be provided here, the University of Victoria and Queen's University (displaying a personal bias as these are my alta maters).

The University of Victoria specifies learning outcomes. The components are:

Intellectual, academic and practical skills in:

•inquiry, analysis, and problem solving
•critical, innovative, and creative thinking
•effective written, visual, and oral communication
•numerical literacy
•critical evaluation of qualitative and quantitative information
•critical management of information, including in digital environments
•collaboration and the ability to work in teams
Personal and social responsibility capacities:
•informed civic engagement and understanding – from local to global
•intercultural knowledge and sensitivity
•ethical and professional reasoning and action
•life-long learning

The various disciplines have flexibility in the ways to achieve these outcomes.

Queen's University converted to a competency-based approach to residency in its medical school several years ago. Traditionally progress is made through residency in accordance with time spent at the various stages. Under competency-based, residents who prove their competence by mastering all the tasks can move to subsequent phases regardless of the timeframe.

More generally, Queen's University is specifying learning outcomes across all programs that go well beyond discipline-specific knowledge. The outcomes span the sort of competencies HEQCO and others have identified. The outcomes are organized under 5 themes:

- Integrity
- Knowledge and intellectual capacities
- Research-focused/practice-oriented
- Interpersonal capacities
- Social responsibility and community engagement

III. The Path Forward: Building on Recent Improvements to Linkages Between Universities and the Workplace

Improving the links between universities and the workplace will require contributions from employers, governments, universities and students.

i) The role for employers

Employers need to continue to articulate the skills they seek and regard as necessary for job success. To the degree feasible, they need to look beyond the most immediate needs to what will best suit their requirements over time.

Employers should consider a broader perspective on recruitment. They do not need to and likely should not seek to hire only people training in what appears to be their specific domain. The late Steve Jobs of Apple could have focused almost exclusively on technology experts. But it put it well in 2011: "technology is not enough – it's technology married with liberal arts, married with humanities, that yields us the results that make our hearts sing" (Alex Usher, Richard Florizone, "The future of work and learning", The Chronicle Herald, September 21, 2018 https://www.the chronicleherald.ca/business/commentary-the-future-of-work-and-learning-243765/).

More imaginative recruiting should reduce measures of so-called over qualification. Employers indicate they want employees with technical skills who are also critical thinkers, communicators and team players. These are features that are likely developed in a liberal arts education. Yet for many employers those programs would not be in their recruitment circle. It should be noted that the kind of workforce Steve Jobs described with very diverse backgrounds would likely have made graduates run afoul of the measure of working in a field fairly directly related to university studies.

Employers need to continue to provide more rich work experiences for students, moving us along the path to all students interested getting an experience prior to graduation.

Employers need to do more training of their employees. According to the Conference Board of Canada (Conference Board of Canada, "Canadian Employers' Investment in Employee Learning and Development Continues to Rise, January 31, 2018), Canadian organizations spend an average of 81 cents for every dollar spent by American organization on learning and development. This is up from only 57 cents in 2006, but in part that is because training efforts have been fading in the U.S. In particular, firms need to recognize recruits need not arrive at their doorstep with all competencies fully in place. Indeed, employers likely have a comparative advantage over universities in developing some of the applied skills.

Finally, drawing from a number of elements above, employers need to think longer term rather than focusing more exclusively on needs apparent at the moment. That longer-term focus would by itself likely lead to greater attention to competencies and greater diversity in recruiting.

ii) Governments

Governments need to continue their investments in universities and skill development more generally. Funding restraints can be an obstacle to expanding the shift to a more competency-based education. It is difficult to teach and evaluate competencies in very large classrooms, for example. Ontario's recent reduction in tuition may seem like good news for students but it will not be if it results in a deterioration in education quality.

Governments can certainly establish performance guidelines for universities. The announcement in the 2019 Ontario Budget to tie much of university funding to performance is interesting and potentially problematic. The Budget did not give the performance metrics. One can anticipate no matter what they are, there will be a certain amount of "gaming" for institutions to look good on the particular measures. This could undermine the efforts to improve the links between universities and the workplace if, for example, the performance metrics are narrowly prescribed and rather short-term. As discussed above, if the objective is to maximize employment of graduates within a few years, education should focus on the knowledge requirements of today. But that may not be the best way to meet students' or society's longer-term needs.

Another note of caution for performance objectives is to allow for differentiation across universities. They can and should serve different markets, for students, disciplines and labour markets. There is a danger with performance measures that all institutions will be evaluated on the same basis and that will force an unfortunate homogeneity in their operations.

iii) Universities

Universities need to be more attuned to the skill requirements of the workplace. As argued in several places above, this does not mean throwing all attention and resources to needs of the moment. Attention to the longer-term is required.

Universities need to expand the effort to teach and measure a broader set of competencies. University education must move further beyond a traditional notion of focusing on discipline-specific knowledge. This will require:

- Identifying the needed competencies
- Figuring out how best to teach them
- Figuring out how best to test or measure competency development including measuring the employment-related skills of post-secondary graduates using psychometrically rigorous tests
- Credentialing competencies
- Striking an appropriate balance between skewing programs towards occupations with persistent high demand or focusing more on developing the skills needed across a broad array of occupations?

Addressing broader competencies will require a fundamental re-think at universities. It will put a much greater premium on teaching skills. It will diminish somewhat the incentive systems now in place that emphasize depth in teaching over breadth. It will require new, innovative approaches to teaching. This will be all the more so as on the surface, a competency-based approach runs on a collision course with features such as larger classes that come with constrained finances. As the EPRI has pointed out, the “soft skills” in particular will require “innovative and effective teaching approaches; student-initiated inquiry, team learning, communication using varied formats, pushing boundaries and so on” (Ross Finnie, 2016).

To the degree it is necessary to set priorities on competencies, whether that be for financial or other reasons, it may pay to focus inordinately on literacy and numeracy to begin. These two competencies are found in common in every list of requirements whether it be from the perspective of students, employers, universities or others. Further, there may be a pay-off to focusing on a particular cohort, that being students who may not be performing at a high level of literacy and numeracy. We know from studies by the OECD and others that higher levels of education bring, on average, higher levels of literacy and numeracy. But those averages likely disguise the reality that not all students or even all graduates have particularly strong literacy and numeracy skills. A priority could be to bring the skills of those students up to or at least closer to the averages realized by university graduates.

Universities will need to reverse the balkanization of increasingly stand-alone disciplines. The modern workplace calls for a wide array of skills. They will not come from a single discipline. Further, many of the transitional or soft skills are in common across disciplines. There is no reason, and it seems inefficient, to teach and measure them in separate discipline silos.

Many jobs in the modern workplace do not fit neatly into a single university department. We will just consider one example here. A job very much in demand today and likely in even greater demand in future deals with energy, the environment and sustainability. In which department and faculty should someone interested in such a job enroll? Engineering? Geography within Arts and Sciences?

Environmental Sciences? Specialized research centres such as on water? Ideally the student would tap into what each of these has to offer. But is that realistic as university programs are currently designed?

There is a certain degree of homogeneity in the "business of universities". Entrants typically come with high marks from high school graduation. One or both parents often attended post-secondary education. Participation is definitely positively correlated with family income. For a variety of reasons, students are more likely to come from urban than rural areas. The diversity of university enrollment needs to continue to expand. In other words, "access" needs to broaden. And with that broadening, there needs to be closer study of potential obstacles to certain students, such as low-income or first-generation students.

The teaching methods applied in universities are also fairly homogenous. That may work for most students. But not necessarily for all. Universities will have to develop way to better teach non-traditional learners.

It can be challenging to make modifications to teaching and learning approaches with limited resources. Limited investment in the best methods to teach non-traditional learners is probably an even bigger obstacle. This is one of many reasons universities will need to pay greater attention to efficiency.

Universities need to do more to develop a model of lifelong learning. A traditional model of loading someone up with human capital until the age of 22 and then letting that capital depreciate over their career no longer works. Things change too quickly. Existing knowledge depreciates too quickly. New things that need to be learned arise too quickly. The problem is ameliorated to the extent universities put emphasis on "learning to learn", flexibility and adaptability. But the current, and even more likely the future, labour market will require people to return to studies later in their career. This will likely be more than a short-term training program.

One of the greatest tests of the link from universities to the workplace will be how well universities serve the large cohort of young Indigenous People. The 2011 National Household Survey revealed that just under 10 per cent of Indigenous Canadians aged 25-65 had a university degree, less than half the 25.9 per cent for all Canadians. The current cohort of young Indigenous People could account for as much as 21 per cent of Canada's labour force growth through 2036 (Don Drummond and Andrew Sharpe, The Contribution of Aboriginal People to Future Labour Force Growth in Canada, Centre for the Study of Living Standards, 2017). The contributions will vary greatly by region, with highs of 83.1 per cent, 72.9 per cent and 52.2 per cent in the three territories, Saskatchewan and Manitoba, respectively. Many Canadian universities have made considerable strides in enrolling more Indigenous students and taking steps to ensure their success. The Government of Canada has made investments in Indigenous post-secondary education, including in the 2019 Budget. Some employers are ensuring their recruitments efforts are more representative. Broadening and deepening the efforts of universities, Governments and employers to ensure far larger numbers of Indigenous Canadians reap the benefits of university education will not only help close the socio-economic gaps facing Indigenous People but as well go a long way to improving employment, income and output prospects for all of Canada and all Canadians.

The focus of this note is universities. We will simply note here that universities cannot carry the entire load of developing broad competencies. The process must begin and indeed be firmly rooted in K-12 education. It is very hard for universities to develop strong skills such as literacy and numeracy if entrants have serious deficiencies at high school graduation.

iv) Students

Students will likely adjust their behaviour, such as discipline choice, appropriately as they get better information. That seems to be happening now. This is not to say that all students will or should choose studies in accordance with market expectations after graduation. There are other factors determining choice, such as interest.

Better information on skill requirements and job opportunities may also lead students to seek jobs and careers that traditionally might not have been thought to be aligned with their studies. As they develop broader competencies, they will likely realize the competencies are transferable and this should open up new horizons.

The dialogue on the link from universities to the workplace almost always presumes an employee-employer relationship. Indeed, this note that fallen into that trap to a consider extent. But despite many deficiencies in the Canadian corporate sector, as captured by the mediocre productivity performance noted above, Canada scores well on the ease of starting and running a business. According to the World Bank Group (Doing Business 2019: Economy Profile Canada), Canada has the third most favourable ranking of 190 countries studied on the ease of starting a business. Canada has a score of 98.3 out of a possible 100 in the ease of running a business.

In this context, more university graduates could think of starting a business rather than seeking an employee relationship. Of course, this would add entrepreneurship to the list of needed competencies to be gained through a university education.

v) All stake holders

All stake holders need to work together to continue improving information. We need a better idea of what happens to university graduates in the workplace. Not just for a few years, but over a long period. If as is commonly asserted, today's graduates will likely have as many as 7 careers, we should have data that tracks how and why they transition from career to career. Was the transition easy or difficult? Did their university training facilitate the transfer? Did they transfer through choice, company bankruptcy or demise of the former occupation?

We need the information that will allow for a mapping of certain characteristics of learning to workplace results. For example, if competency-based education is superior, we should be able to identify students taking studies under that approach and see superior results.

We should better measure the broader benefits of higher education to society. This is typically encapsulated in the cold, hard statistic on the "social rate of return". This could be brought to greater life through measuring the ways in which the educated person brings higher value to society. The OECD is beginning to do important work in this area, measuring for example, the impact of education on environmental awareness and action.

Canadian Universities in Financial Peril

Recent headlines have focused on half of Ontario universities being in deficit. But so are many across the country. The 3 English universities in Quebec will be hurt by the province-mandated increase in tuition for out-of-province students. The financial problem has been building for some time, but recent catalysts include declines in provincial grants and, in the case of Ontario, a freeze in tuition, all juxtaposed on increasing costs, all the more so with high inflation of late.

In the case of Ontario, a modest increase in funding has been announced. But with a continuation of the tuition freeze, the financial plight of universities will continue.

One can argue universities (and especially colleges, and within colleges the private ones) had become too dependent upon international students. But the recent federal announcement of a lower limit for international student visas will further exacerbate the financial woes (international students pay more than 5 times the tuition of domestic).

The Ontario Government may think they are doing students a favour with the tuition freeze. But combining that with a reduction in grants is jeopardizing the quality of education.

Early Childhood Education and Care

Early childhood education has long been established in the education literature and research as a key to readiness for K-12 education and a basis for participation in post-secondary education and lifelong learning. Childcare has traditionally been thought of as a means of supporting female labour force participation, particularly for low-income families. Increasingly the two areas are considered to work together, so the reference is now typically to Early Childhood Education and Care. Early childhood education also offers an opportunity to teach and reinforce First Nations languages and cultures.

In most aspects of education, the outcome objectives recommended in this report are framed in terms of closing the gaps between First Nations people and other Canadians. Settling on a “Canadian benchmark” is more challenging with early childhood education and care because Canada is not in general very advanced this area relative to other developed countries and without a national strategy, there are tremendous discrepancies across provinces and territories.

In 2006 the OECD did a groundbreaking report, Starting Strong, on early childhood education and care. They identified Canada as a laggard for having the worst access of the developed countries studied. Despite progress, Canada still does not fare well. The percentage of 4-year-olds accessing early childhood education in 2014 was only 58 per cent, far short of the OECD average of 80 per cent. Of 22 countries analyzed, Canada's access was 15th. As a percentage of GDP, Canadian public spending on early childhood education and care is about half the OECD average (CCPA). The differentiation across provinces is observed in the fact that in the Prairie Provinces only one in three children attend preschool compared to two out of three in Ontario and three out of four in Quebec.

The same weak performance on average with tremendous provincial variation is noted for childcare. Across Canada 24.9 per cent of children 0 to 12 years old have a registered childcare space but that average includes 50.8 per cent in Quebec and 8.1 per cent in Saskatchewan (Friendly et al).

The Ontario Institute for Studies in Education advanced a simple, but ambitious objective for Canada – all children aged 2 through to elementary school have access to high quality, early childhood education. All jurisdictions in Canada fall short of such an objective, some much more than others. First Nations communities fall particularly short.

Only 22 per cent of First Nations children have access to early childhood programs (Assembly First Nations. "Early Childhood Education in First Nations Communities". 2012). (NOTE: the same figure is cited for not having licensed childcare services – co-incidence or confusion???). The same low figure of 22 per cent represents the portion of children aged 0 to 5 with access to licensed children care services in First Nations communities (???coincidence or confusion). Indeed, 33 per cent of First Nations communities do not have any licensed childcare providers.

We could propose that the objectives for early childhood learning and childcare be based on closing the gaps with Canadian averages. That would mean almost tripling the access of First Nations children to early childhood education. It would not, however, require a large increase in access to licenses daycare, given the low accessibility in many parts of the country.

Instead, we believe more ambitious targets are in order given the critical importance of early childhood learning and care to overall education, economic, equality, language and cultural objectives. As such, we recommend:

- 80 per cent (the OECD) average of First Nations 2- to 4-year-olds have access to preschool programs. Progress can begin almost immediately given the young and narrow age band under consideration. The 80 per cent target should be achieved in 10 years with the Canadian measure of 60 per cent attained in 5 years.
- 50 per cent of First Nations children 0 to 5 and 0 to 12 should have access to registered childcare. This would exceed the current Canadian figure but fall short of Quebec's for the 0 to 12 age group. This too should be achieved within 10 years with a 35 per cent access rate targeted in 5 years.

Friendly, Marta, Grady, Bethany, Macdonald, Lyndsay and Forer, Barry. Early Childhood Education and Care in Canada. 2014

McCracken, Molly and Prentice, Susan. Fast Facts: Canadians Deserve a Universal Early Childhood Education and Child Care System. Canadian Centre for Policy Alternatives. November 13, 2014

Ontario Institute for Studies in Education. Early Education Report 2014.

Assembly of First Nations. Early Childhood Education in First Nations Communities. 2012.

Assembly of First Nations. A Portrait of First Nations and Education. 2012.

MPA 887 Reforming Public Services

Summer 2024

Social Policy

Don Drummond

What is social policy?

Many definitions.

One from the London School of Economics is as good as any. http://www.lse.ac.uk/social-policy/about-us/What-is-social-policy

Social policy is concerned with the ways societies across the world meet human needs for security, education, work, health and wellbeing. Social policy addresses how states and societies respond to global challenges of social, demographic and economic change, and of poverty, migration and globalisation. Social policy analyses the different roles of: national governments, the family, civil society, the market, and international organisations in providing services and support across the life course from childhood to old age. These services and support include child and family support, schooling and education, housing and neighbourhood renewal, income maintenance and poverty reduction, unemployment support and training, pensions, health and social care. Social policy aims to identify and find ways of reducing inequalities in access to services and support between social groups defined by socio-economic status, race, ethnicity, migration status, gender, sexual orientation, disability and age, and between countries.

Discussed in other lectures:

Schooling and education

Unemployment support and training

Health

Poverty incidence

Income re-distribution

Discussed here:

Child and family support

Housing

Poverty reduction

Pensions

1. **Child and family support**

As there are federal, provincial/territorial and municipal programs, location matters. We will focus on Ontario.

https://maytree.com/wp-content/uploads/Welfare_in_Canada_2022.pdf

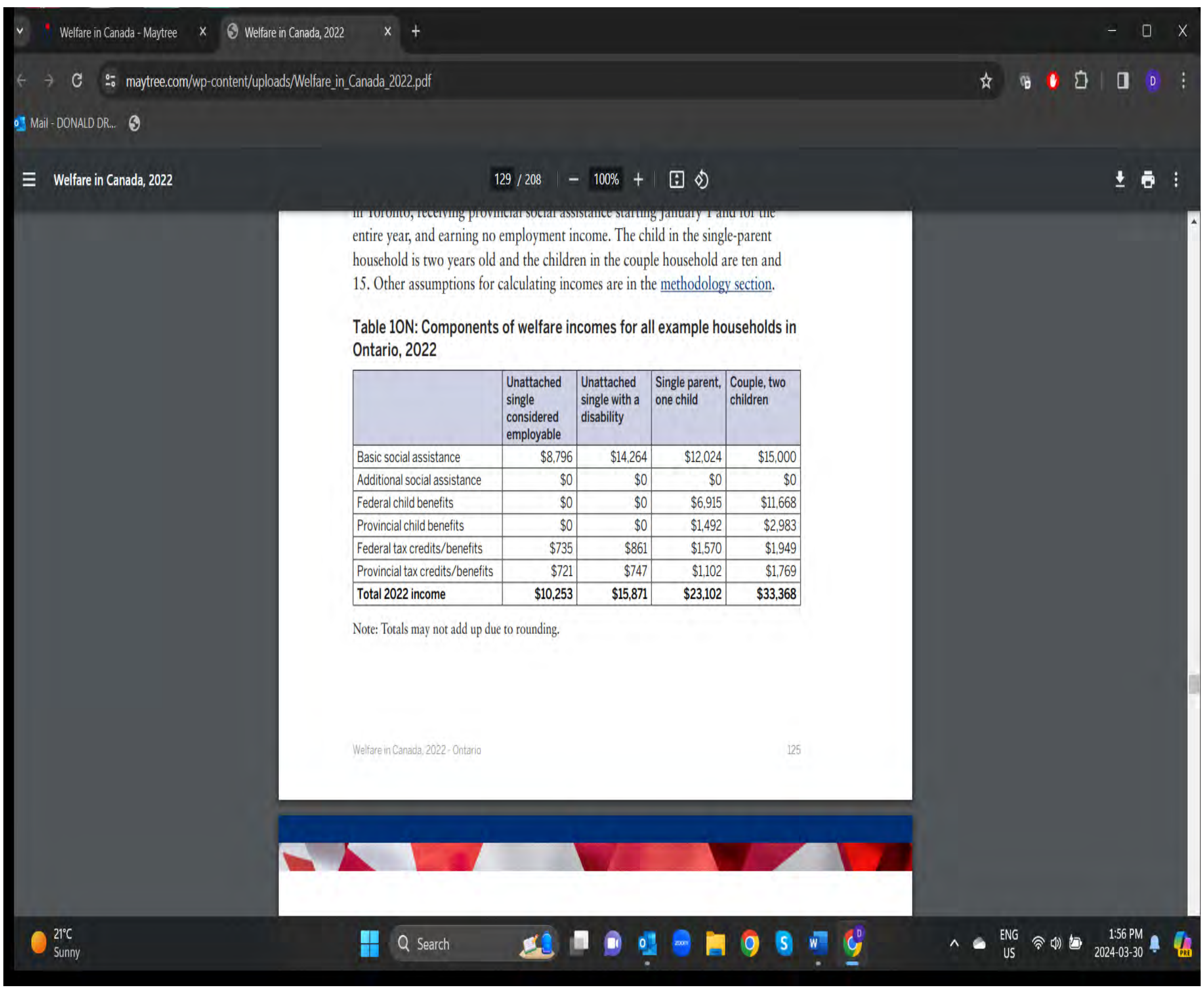
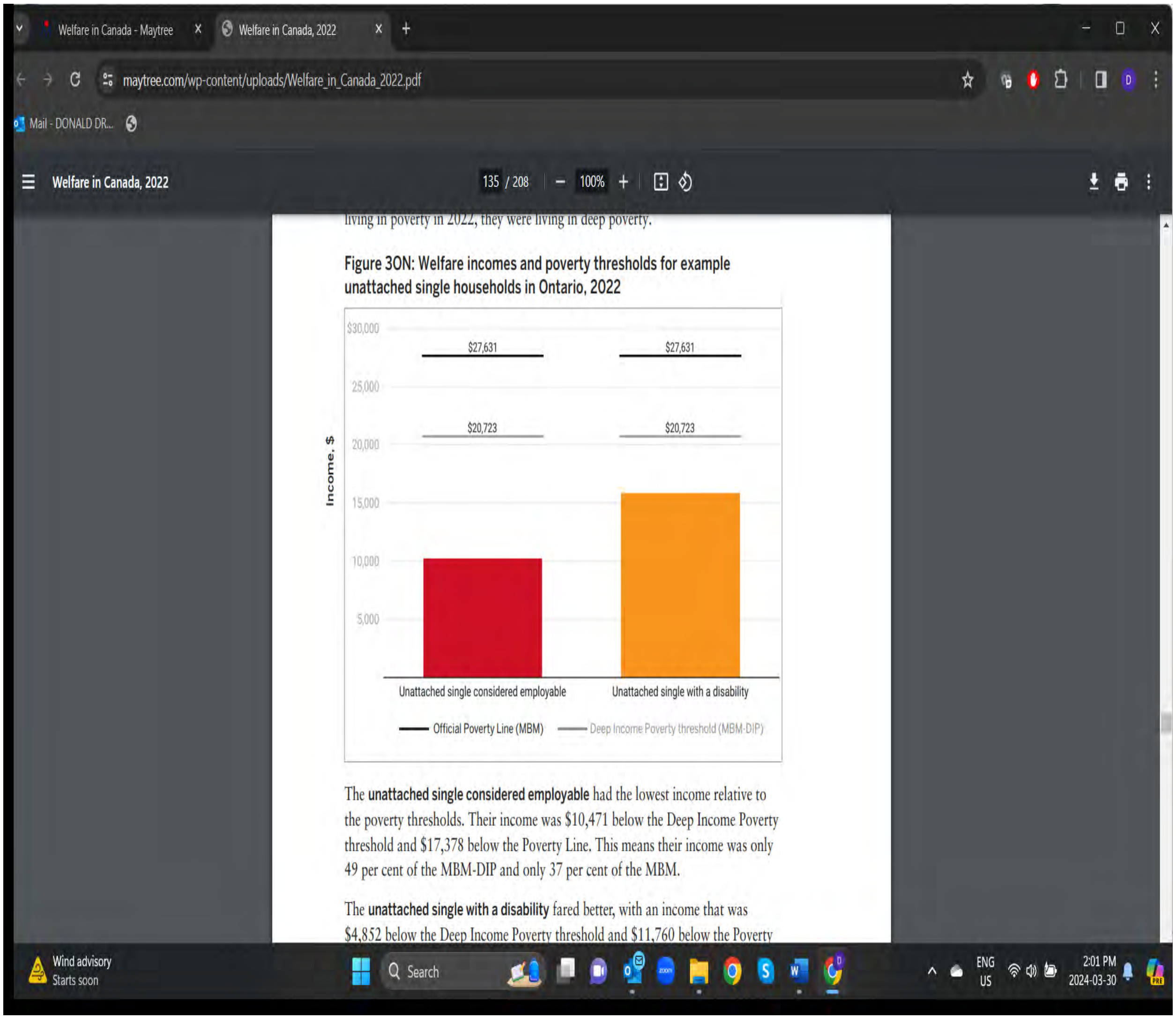

entire year, and earning no employment income. The child in the single-parent household is two years old and the children in the couple household are ten and 15. Other assumptions for calculating incomes are in the methodology section.

Table 10N: Components of welfare incomes for all example households in Ontario, 2022

	Unattached single considered employable	Unattached single with a disability	Single parent, one child	Couple, two children
Basic social assistance	$8,796	$14,264	$12,024	$15,000
Additional social assistance	$0	$0	$0	$0
Federal child benefits	$0	$0	$6,915	$11,668
Provincial child benefits	$0	$0	$1,492	$2,983
Federal tax credits/benefits	$735	$861	$1,570	$1,949
Provincial tax credits/benefits	$721	$747	$1,102	$1,769
Total 2022 income	**$10,253**	**$15,871**	**$23,102**	**$33,368**

Note: Totals may not add up due to rounding.

Welfare in Canada, 2022 - Ontario 125



Welfare in Canada - Maytree | Welfare in Canada, 2022

maytree.com/wp-content/uploads/Welfare_in_Canada_2022.pdf

Welfare in Canada, 2022 — 135 / 208 — 100%

living in poverty in 2022, they were living in deep poverty.

Figure 3ON: Welfare incomes and poverty thresholds for example unattached single households in Ontario, 2022

The **unattached single considered employable** had the lowest income relative to the poverty thresholds. Their income was $10,471 below the Deep Income Poverty threshold and $17,378 below the Poverty Line. This means their income was only 49 per cent of the MBM-DIP and only 37 per cent of the MBM.

The **unattached single with a disability** fared better, with an income that was $4,852 below the Deep Income Poverty threshold and $11,760 below the Poverty

https://www.unicef.ca/sites/default/files/2023-12/UNICEFReportCard18CanadianCompanion.pdf

Canada's work to lift children out of poverty is not done. In 2021, the most recent year of available data, the child poverty rate in Canada moved in the wrong direction. Child poverty increased for the first time in many years, largely due to the end of pandemic income programs and the rising cost of living. The poverty rate rose more sharply for children than for the general population. After years of progress, Canada is a middle performer among rich countries for its rate of child poverty.

• Canada ranked 19th of 39 countries for its child poverty rate: averaging 17.2 per cent between 2019 and 2021.

• More than one million children in Canada are growing up in poverty.

• Three countries have a child poverty rate at or below 10 per cent: Denmark, Slovenia and Finland.

• Child poverty in Canada made a U-turn in 2021, rising to 17.8 per cent from 15.2 per cent in 2020.

In this Report Card, child poverty is measured by the percentage of children in households with income below 60 per cent of the median national income (LIM-60).

https://www12.statcan.gc.ca/census-recensement/2021/as-sa/98-200-X/2021009/98-200-X2021009-eng.cfm

Highlights

- Based on data from the 2021 Census of Population, the poverty rate in Canada was 8.1% in 2020, down from 14.5% in 2015.
- Poverty declined among all ages, but especially so for children. In 2020, the poverty rates of children aged 0 to 5 years (9.1%), 6 to 10 years (8.5%) and for youth aged 11 to 17 years (7.9%) were all less than half their levels in 2015.
- Declines in poverty were driven by higher government transfers in 2020, including the enhanced Canada Child Benefit (CCB) and temporary pandemic relief benefits.
- In 2020, the poverty rate for one-parent families headed by a woman with a child aged 0 to 5 was 31.3%, the highest among all family types, and more than five times the rate of couple-families with a child of the same age (6.0%).
- From 2015 to 2020, the poverty rate for one-parent families headed by a woman with a child aged 0 to 5 fell by more than half, declining from 62.7% to 31.3%.

- The poverty rate of immigrants declined by more than half from 2015 to 2020, falling from 18.8% to 9.1%. However, poverty was more prevalent among immigrants than among the Canadian-born population, particularly among refugees and recent immigrants (those who landed in the five years preceding the census year).

From the 2016 Census

In 2015, 44.0% of the on-reserve population in Canada lived in low-income households. In comparison, about 14.4% of the total population in Canada was considered to be living in low income in 2015.

The low-income rates were lower for the non-Indigenous population than for all Indigenous identity groups in all geographic areas. The highest low-income rates were found for First Nations living on reserve.

https://www150.statcan.gc.ca/n1/daily-quotidien/210921/dq210921d-eng.htm

In addition to poverty, First Nations (as well as Metis and Inuit) First Nations children are disproportionately in care of the state.

In Canada, 53.8% of children in foster care are Indigenous, but account for only 7.7% of the child population according to Census 2021.

Results from the 2011 National Household Survey also show that 38% of Indigenous children in Canada live in poverty, compared to 7% for non-Indigenous children.

https://www.sac-isc.gc.ca/eng/1541187352297/1541187392851

"There are **more First Nation children** in **care today than during** the height of **residential schools**," said Shawn Atleo, former National Chief of the Assembly of **First Nations**. "We cannot lose another generation to the mistakes of the past. **First Nations** are the youngest and fastest growing segment of the population.

2. **Housing**

Definition of Core Housing Need

A household is said to be in core housing need if its housing falls below at least one of the adequacy, affordability or suitability, standards and it would have to spend 30% or more of its total before-tax income to pay the median rent of alternative local housing that is acceptable (meets all three housing standards). Housing standards are defined as follow:

- **Adequate** housing is reported by their residents as not requiring any major repairs.
- **Affordable** housing costs less than 30% of total before-tax household income.
- **Suitable** housing has enough bedrooms for the size and makeup of resident households according to National Occupancy Standard (NOS) requirements.

Housing can be addressed through public construction, subsidies to builders/landlords, tenants or more indirectly through other policies that strengthen employment and incomes.

Subsidies to builders or tenants are designed to narrow the gap between the “market cost” of housing and what tenants can “afford”.

http://www.urbancentre.utoronto.ca/pdfs/home/debates/TDAffdHousing.pdf

TD Proposal

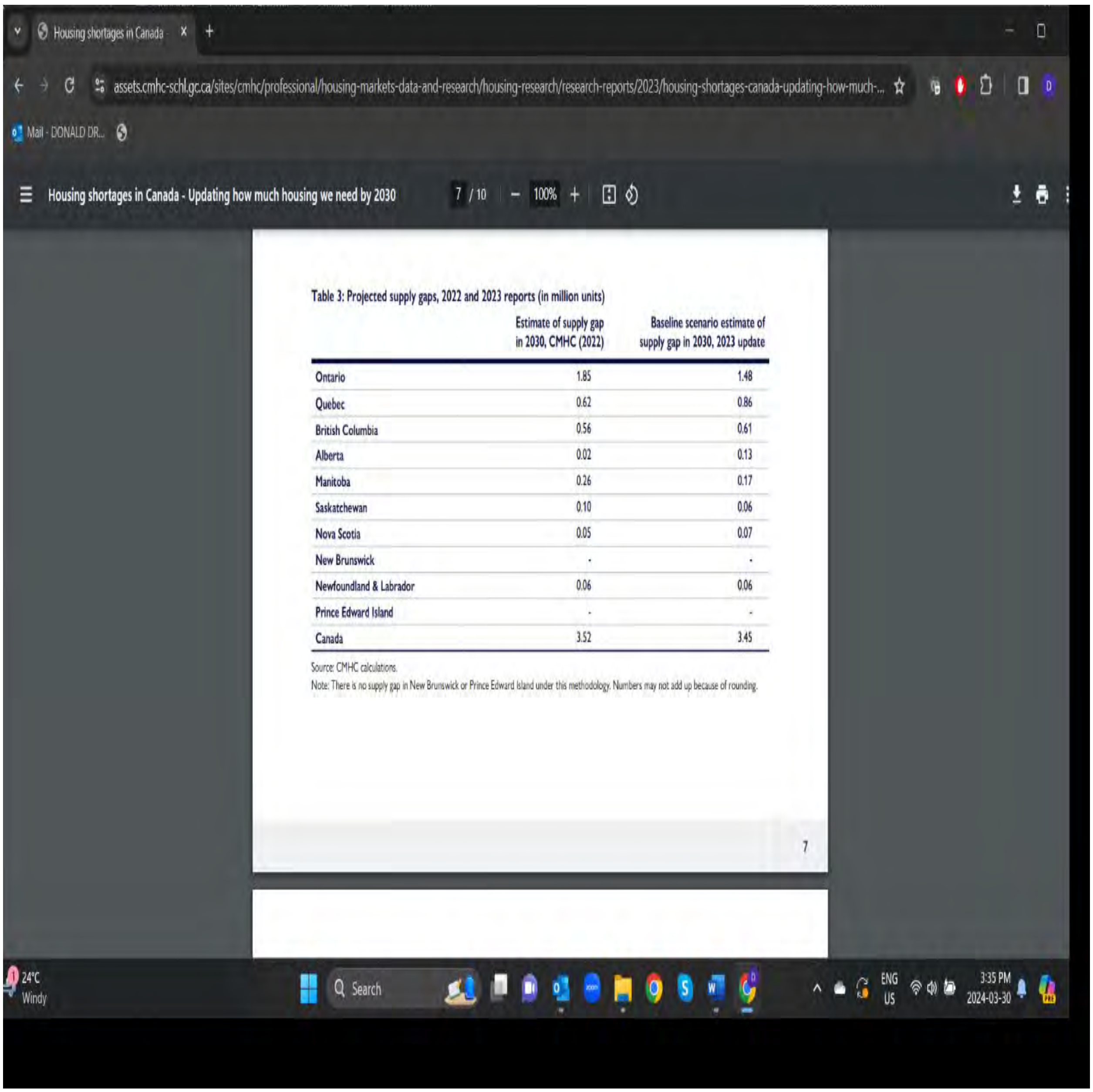
We argue that the ultimate solution to the affordable housing problem is to raise market incomes and develop a more effective and equitable income transfer regime to help lower-income households avoid the perils of the proverbial low-income trap. However, as these are necessarily longer-term objectives, complementary actions will be required in the interim to:

(a) improve supports for lower-income individuals

(b) address the current supply shortage

(c) remove market imperfections that contribute to the supply shortage.

CMHC estimates a 3.5 million supply gap of housing in 2020.



Housing shortages in Canada - Updating how much housing we need by 2030

Table 3: Projected supply gaps, 2022 and 2023 reports (in million units)

	Estimate of supply gap in 2030, CMHC (2022)	Baseline scenario estimate of supply gap in 2030, 2023 update
Ontario	1.85	1.48
Quebec	0.62	0.86
British Columbia	0.56	0.61
Alberta	0.02	0.13
Manitoba	0.26	0.17
Saskatchewan	0.10	0.06
Nova Scotia	0.05	0.07
New Brunswick	-	-
Newfoundland & Labrador	0.06	0.06
Prince Edward Island	-	-
Canada	3.52	3.45

Source: CMHC calculations.

Note: There is no supply gap in New Brunswick or Prince Edward Island under this methodology. Numbers may not add up because of rounding.

7

How to get more housing in Canada?

https://www.fraserinstitute.org/article/there-are-no-solutions-to-canadas-housing-crisis-only-trade-offs

First, we can build our cities outward. And accelerate the creation of new neighbourhoods at the edge of our communities, as has been Canada's way for most of its history, but especially after the Second World War and mass adoption of personal automobiles. Canada has also traditionally used its enormous landmass to build entirely new cities including railroad and resource boomtowns from Calgary to Dawson City.

The trade-off? More land for homes means less land for everything else. Canadians who currently oppose the redesignation of farmland or other rural areas surrounding cities would need to accept more homebuilding in these areas. And in more remote regions targeted for development, the thorny issue of divvying up Crown land (the majority of Canada's land area) would inevitably emerge.

Second, we can grow upward and become denser by shoehorning additional homes into existing neighbourhoods. To an extent, we're already doing this—more than half of homebuilding between 2016 and 2021 occurred within existing urban areas, and recent government reforms (e.g. allowing the conversion of single-family homes to triplexes) signal an appetite for more. But given the estimated housing shortage, Canada's cities would need to at least triple or quadruple the current rate of densification to close the housing gap.

The trade-off here is that most neighbourhoods would change—perhaps drastically. Canadians in urban areas, for instance, would need to mentally divorce themselves from the notion of owning single-family detached homes with garages and yards, and accept that neighbourhoods can't stay frozen in time. As famed urbanist and former Torontonian Jane Jacobs put it, "a city cannot be a work of art."

Third, we can grow our population more slowly. Faced with an enormous gap between the number of homes Canada needs and the number built, we could simply shrink the need. Governments (thankfully) don't control how many children Canadians have, but they do determine immigration policy and the number of permanent and non-permanent residents in Canada. Anyone broadly opposed to historic increases in homebuilding (either at the urban fringe or within existing neighbourhoods) but still wishing to improve affordability, wants to reduce population growth—whether they know it or not.

The trade-offs here are more complex. If the federal government reduces immigration levels, Canadians must accept new demographic realities and policy solutions (that is, more trade-offs) such as vast improvements to productivity to complement a slower-growing or perhaps shrinking workforce, and changing how and when Canadians retire, among other considerations.

Of course, there are many variations to these three broad choices. Canadians would likely pick variations of one, two or all three combined. We could also pick neither, and in many ways we have. We don't build enough homes either within or outside of existing urban areas, and our population is growing faster (in absolute terms) than at any other time on record.

Tellingly, most respondents in a recent poll supported increasing housing density in Canadian cities, yet just 20 per cent agreed it was a “good thing” for their neighbourhood (43 per cent saw density as a “bad thing”). Clearly, many Canadians do not yet understand the trade-offs required to improve affordability.

Politicians are only as effective as the demands we make of them, and right now, those demands remain unclear. Until we’ve collectively rallied behind some variation or combination of the broad options listed here—including its trade-offs—to close the gap between the number of homes we need and the number available, our implicit preference is the status quo. It’s as simple as that.

3. Poverty reduction

August 21, 2018, the Canadian federal government introduced Canada’s first poverty reduction strategy.

https://www.canada.ca/en/employment-social-development/programs/results/poverty-reduction.html

Canada’s Official Poverty Line:

- Is the first official poverty line in Canada’s history

Targets:

1. Reduce poverty by 20% by 2020 and by 50% by 2030, as measured by Canada’s Official Poverty Line
2. Reduce chronic homelessness by 50%
3. End all long-term drinking water advisories on public systems on reserve by March 2021
4. Housing need reduced or eliminated for 530,000 households

A National Advisory Council on Poverty:

- Track and publicly report on progress, provide advice and continue dialogue with Canadians

Measurement and tracking progress:

- Improve understanding of poverty by regularly updating Canada’s Official Poverty Line, addressing data gaps and tracking progress through an indicator dashboard Poverty reduction legislation:

- Propose to legislate the vision, targets, Canada's Official Poverty Line as the official measure of poverty and accountability mechanisms Pillars:
    1. Dignity: Lift Canadians out of poverty by ensuring basic needs are met
    2. Opportunity and Inclusion: Help Canadians join the middle class by promoting full participation in society and equality of opportunity
    3. Resilience and Security: Support the middle class by protecting Canadians from falling into poverty and by supporting income security and resilience Government investments that support poverty reduction

A course of action that is meaningful, measurable and monitored

- Focuses on targets, measuring, accountability, (vague) talk of direct action at roots of poverty, addressing some symptoms of poverty (better drinking water, more affordable housing)
- In general, there are direct and indirect approaches.
- Direct approach would see increases in benefits such as Child Tax Benefit, Guaranteed Income Security
- Indirect approach would be to improve education for disadvantages children, improve adult literacy
- In a way, poverty is the end result of (failure) all other policies.

4. Pensions

Public pension system consists of Guaranteed Income Supplement, Old Age Security and Canada/Quebec Pension Plan

OAS/GIS guarantees at least a subsistence level of income for Canadians with long enough residency.

CPP works well for those with employment/earnings history.

More elderly have been falling into “poverty” under measures such as LIM (less than half of median income) because there have been some real income gains at the median whereas there were no real increases in GIS or OAS in 4 decades until the OAS increase in July 2022 for those 75 years old and over.

Public/Private pension system includes the tax advantage for Registered Retirement Savings Plans and Tax Free Savings Accounts. Challenge arising, however, under the extended period of very low rates of return to investments.

Private pension system includes company sponsored pensions for employees (or co-ordinated group private plans for employees).

> 37 per cent of Canadian males have a company pension plan (RPP) and 40 per cent of females have one.
> https://www150.statcan.gc.ca/n1/pub/11-630-x/11-630-x2015003-eng.htm
>
> Pension plans have been shifting from defined benefit to defined contribution

In addition to declining pension coverage, low rates of returns are creating solvency problems for defined benefit pensions and upward pressure on contributions and downward pressure on benefits for defined contribution plans.

MPA 887

Reforming Public Services

Summer 2024

Economic Development, Innovation, Business Support and Labour Markets

Probably not a government in the world that does not want to raise its economy's economic growth rate. Better-off residents. Higher government revenues without needing to raise tax rates.

But few public interventions work.

Circa mid-1990s there was a fairly tight consensus among economists and policy makers that improving macroeconomic policies would raise economic growth. A reason to believe in this was that macroeconomic policies had been quite bad.

- Until inflation targeting, inflation had been high and variable, leading to wild economic cycles
- High inflation led to high interest rates which curbed investment
- Government deficits and debt were high
- Until FTA/NAFTA, tariffs had been high
- High state ownership of industries that impeded competition and growth
- High tax rates including on corporate income and capital
- Et cetera

But many of these policy flaws were addressed. And growth, and more to the point, productivity, did not pick up (since 2000, labour productivity has averaged less than 1 per cent per annum, total factor productivity has shown no growth – meaning all labour productivity has resulted from higher capital and productivity growth has been even weaker of late).

Try again?

Or try something different.

This was at the heart of "Confessions of a Serial Productivity Researcher".

http://www.csls.ca/ipm/22/IPM-22-Drummond.pdf

1. Canada had strong(er) productivity through 1970s. Strengthening it has been a priority for most governments since at least the mid-1980s. See Agenda for Economic Renewal as an example. But growth has been weak. 1 per cent per annum productivity growth since 2000. Zero growth on total (capital and labour) factor productivity. Weak relative to other countries although many of those now slowing as well. Canada used to have one of the highest levels of productivity in the OECD. It has slipped badly since. Canada's productivity has fallen from 90 per cent of US levels in 1985 to 78 per cent in 2016. Over this time period, Canada's productivity growth ranked 15th-**slowest** out of 18 comparable OECD economies, and real median wages have remained effectively flat.
2. Projections done for the Council of the Federation by CSLS. Real growth 2014-2038 of 1.6 per cent per annum. Most forecasters seem slow to recognize this low(er) potential growth rate. Media even slower. Tough to enrich people and finance health care with such a growth rate.
3. Canada followed a strategy of improving macro-economic policies over 30 years. Maybe it was a necessary element of raising productivity growth. But it does not seem to have been sufficient. These macro-efforts were accompanied by lots of direct and indirect supports for science, generous support for R&D and other elements of an industrial policy. But still, not much to show for the effort. Maybe it would have been worse otherwise?
4. Seemed time to look at something else. The residual in the production function. Business behaviour. Labour markets. Risk appetite of business. Roger Martin, former Dean of Rotman Business School laid it on the doorstep of lower enrollment in Canadian business schools relative to the United States, but the gap has closed.
5. The policy agenda seems more complex now than 30 years ago, but rightly so. Then it was just more growth. Now one needs to be concerned with the distribution of the spoils of the growth and the negative externalities like environmental damage and resource depletion. Also, one can be much less certain now that higher productivity growth will lead to higher real wages. That "economic law" has been seemingly broken of late whereby productivity gains seem to go disproportionately to capital interests. Perhaps because capital is better placed to reap the benefits of globalization (more mobile).
6. Major problem was that data to analyze business behaviour (firm-level data) were only accessible by a small group of researchers working for Statistics Canada. Led to a multi-year effort to "free the data". Still not quite free – have to work on the data in Ottawa, expensive cost recovery, little documentation, lots of gaps and aggregations due to confidentiality/thin industrial structure in Canada. So far considerable interest in doing research with the data, but mostly "smaller" issues being analyzed, not the "big" issues of why Canada's productivity is not stronger.
7. Major OECD initiative and rightly so as they created/bought into the paradigm. Much more focus on labour markets. Seems to make sense. BUT Canada does fairly well on their measure of labour matching. But does this measure make sense? Is it a problem to have workers who are over-skilled or is that just a lack of imagination on the part of employers? New set of measures and again Canada does well (except slow to give building permits).
8. OECD, IMF, Deloitte revealing the interesting finding of huge discrepancies across companies in the same sector. And huge discrepancies in productivity levels of different countries in how they produce the same thing. Why isn't there more imitation. Limits in entrepreneurial talent

cited (but why don't people seize the opportunity, foreigners come in et cetera). Limits in skill levels of domestic work force.

9. Innovation, Science and Economic Development set out an innovation agenda with 6 areas of focus

Promoting an entrepreneurial and creative society

Supporting global science excellence

Building world-leading clusters and partnerships

Growing companies and accelerating clean growth

Competing in a digital world

Improving ease of doing business

OK, but how to accomplish something in these domains?

10. ITIF Information, Technology & Innovation Foundation. Support clusters more directly. Subsidize investment, especially in IT. Investment tax credits for example.
11. New approach by John Lester, Bev Dahlby et cetera involving marginal cost of funds. The cost is really high. Makes the bar very high for a positive Benefit/Cost ratio of intervention.

TABLE 2 THE MARGINAL COST OF PUBLIC FUNDS FOR THE PROVINCIAL GOVERNMENTS, 2013

	Marginal Cost of Public Funds		
	(1)	(2)	(3)
	Corporate Income Tax	Personal Income Tax	General Sales Tax
British Columbia	3.19	2.86	---
Alberta	2.91	1.41	1.00
Saskatchewan	***	2.38	1.41
Manitoba	4.70	2.42	1.34
Ontario	5.21	6.76	—
Quebec	3.62	3.05	1.92
New Brunswick	***	1.91	1.42
Nova Scotia	***	---	1.62
Prince Edward Island	***	2.80	2.44
Newfoundland and Labrador	***	2.16	1.57

Note: "*" indicates that a tax rate increase would reduce the long-run total tax revenues.

--- indicates that the MCF could not be computed because the own semi-elasticity could not be estimated.

The MCF for provincial corporate income tax in 2013 are reported in column (1) of Table 2.[49] The MCF was not computed for Saskatchewan, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador because the computations indicated that these provinces were on the downward-sloping sections of their long-run total revenue Laffer curves — i.e., a reduction in their CIT rates would increase their long-run total tax revenues. For the other provinces, the MCF for the CIT range from about 2.91 for Alberta to 5.21 for Ontario. The low MCF for Alberta is in marked contrast with the results in our 2012 study,[50] a point that we will return to later. Column (2) of Table 2 show that the MCF for PIT ranges from 1.41 for Alberta to 6.76 for Ontario. The low MCF for Alberta may be explained by the fact that the province has had the lowest top personal income tax rate in the federation since 2001. For year 2013, Quebec has the second-highest MCF for PIT even though the estimated tax-base own semi-elasticity estimates are (in absolute value) the lowest in the country. This may be due to the fact that the province has the highest statutory top personal income tax rate in the country. Note also that, with the exception of Ontario, the CIT has the highest MCF and the PST has the lowest MCF. The reversal of ranking for

Most programs failing benefit-cost analysis under this approach. Even SR&ED. Investment tax credits ok, however. BUT, analysis does not address distinction between the relative price of new and existing capital. So jury is still out. Makes it hard to introduce a program that has a net benefit. The bar is very high.

Where does this leave us?

Something old:

- Shift tax burden away from capital (especially for provinces with RST)
- Broaden tax base, lower rate
- (clean) public infrastructure
- Promote competition
- Expand trade markets
- Finish off inter-provincial barriers

Something new:

- Improve labour markets (especially flowing from better information)
- Improve PISA scores (or what they represent – don't just focus on basic cognitive) (especially lifting the bottom)
- Focus more on competencies in education and training?
- More mentoring of businesses??
- More direct government involvement in business???
- Switch further from tax incentives to direct grants???

Example of an Actual Government Subsidy

Tax Incentives to encourage the production of films, videos and television programs in Canada by foreign producers.

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2895836

1. $1/2 billion cost of the subsidy
2. Why? Culture. Not really. Economic (increased employment in film industry and hope of creating more of a domestic industry)
3. Question. Is it a net (social) benefit? In the first instance, it is $1/2 billion that could have gone elsewhere. Does it generate more benefits than costs?

$470 million subsidy

¼ of costs of firms undertaking foreign location shoot in Canada

75/25 federal/provincial split

TEST: What does it do to real incomes of Canadians?

It has no direct effect on aggregate demand (taxes raised to fund the ½ billion dollars).

COSTS

1. Administration to government
2. Compliance costs to firms
3. $1/2 billion higher taxes elsewhere
- Discourages work, savings, investment
4. Reallocates resources away from a market-determined (economically efficient) allocation
5. Leakages from Canada (money raised in Canada leaves the country)

BENEFITS

1. Tax revenue from non-residents working in Canada
2. Lower Canadian filming costs due to increased scale

AGAIN NOTE, the cost of the subsidy, $1/2 billion, does not increase net incomes. It is an expenditure ultimately funded by taking $1/2 from Canadians in taxes. IN AND OUT. Resources would have been deployed elsewhere.

Worse, in raising $1/2 billion in taxes, the economy is hurt.

Baylor & Beausejour estimate the average efficiency cost for major taxes is 29 cents on the dollar. For every dollar raised in these taxes, real output is reduced 29 cents.

Dahlby has a similar estimate at 26 cents.

Baylor, Maximilian, and Louise Beauséjour (2004). Taxation and Economic Efficiency: Results from a Canadian CGE Model. Working paper 2004-10 (November). Canada, Department of Finance.

Dahlby, Beverly (1998). Progressive Taxation and the Social Marginal Cost of Public Funds. Journal of Public Economics 67, 1: 105–22.

https://www.sciencedirect.com/science/article/abs/pii/S0047272797000492

BENEFITS

Tax revenue collected increased only $7 million (foreigners tend to pay tax in their home jurisdiction)

Industry costs decreased $51 million. (size-related benefit)

Total Benefits $58 million

COSTS

Tax credit accruing to U.S. producers	$280 million (60 % leakage)
Economic loss from taxes raised	144
Economic loss from resource reallocation	81
Administrative cost	3
Compliance cost	3
Total Costs	511
NET BENEFITS	-453 (58-511)

Subsidy **reduces** well-being of Canadians.

Bottom line:

“In the absence of a market failure, there are generally no economic benefits from economic development programs, only costs” (Lester, 2013)

Example of a Potential Economic Development Project

High Speed Rail Windsor to Quebec City

Examined in depth in 1995

http://www.bv.transports.gouv.qc.ca/mono/0985548.pdf

Folklore is that studies showed an unfavourable Benefit-Cost ratio.

That is not really true. It depends upon the discount rate chosen and project life and design.

Some tools for analysis:

Project Cost (capital and operating)

Project Benefits (usually occurring over a period of time)

Discount rate

The discount rate is the rate at which future costs and benefits are converted to their present equivalents. Discounting accounts for the fact that:

- there is a time preference for current consumption over future consumption (social discount rate)

- funds used to comply with regulatory requirements could have been invested and earned a return at the rate of the opportunity cost of capital

From 1976 to 1998 the Treasury Board Secretariat recommended using a social discount rate of 10 per cent. In 1998 this was lowered to 8 per cent with a range of 3 to 10 for sensitivity analysis.

The Auditor General of Canada has criticized several times the TBS guideline on the discount rate, arguing it is too high and does not reflect changes in markets and practices in other countries.

Illustration

Project Costs of $1 billion incurred in Year One.

Project Net Benefits (benefits less operating costs) of $100 million (real) per annum.

Discount Rate of 7 per cent.

Ignoring the discount rate for a moment, the project would have a Benefit/Cost ratio of greater than 1 after 10 years.

Stream of net benefits over 11 years = $1.1 billion.

Capital cost $1 billion.

Benefit/Cost Ratio 1.1

Less than 10 year project life would yield a B/C ratio of less than 1

The longer the project life, the greater the B/C ratio

The issue is that Benefits in future are worth less than money today.

So, we should **discount** the future stream of net benefits.

Let us use a 7 per cent discount rate.

Stream of discounted net benefits:

Year One	$100 million
Year Two	100/(1.07) = 93.5
Year Three	100/(1.07)**2= 87.34
Year Four	100/(1.07)**3=81.63

Now a B/C ratio does not exceed 1 until Year 15 (discounted stream of benefits adds to $1.012 B)

So, with these assumptions, the project appears favourable if it has a life of 15+ years; unfavourable if it has a shorter life

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Practical Example: High Speed Rail

Options within Windsor-Quebec City Corridor analyzed in 1995

Costs: Capital, Operating and Environmental (negative aspects)

Benefits: Lower VIA costs

Lower VIA operating costs

Operating revenue in taxes

Labour externalities (wider market for employees and employers)

Labour externalities (getting people out of cars)

Consumer surplus (lower wait times, lower travel times)

Net Present Values of 6 scenarios at 8 per cent discount rate

(NOTE: Net present value like a Benefit/Cost ratio but expressed as a level)

Project Life assumed to be 30 Years

	NPV Canada (1993 $million)
Quebec City to Windsor through Mirabel 300 kms/h	683.5
Quebec City to Windsor through Dorval 200 kms/h	-319.7
Quebec City to Windsor through Dorval 300 kms/h	1186.8
Montreal to Toronto through Mirabel 300 kms/h	687.9

Montreal to Toronto through Dorval 200 kms/h	82.7
Montreal to Toronto through Dorval 300 kms/h	1284.8

All designs have a positive net present value except Quebec City to Windsor through Dorval at 200 kms/h.

Great sensitivity to the discount rate applies.

At 7 per cent, all projects are positive.

At 10 per cent, all projects are negative except Montreal to Toronto through Dorval at 300 kms/h.

The analysis cleared concluded there was a viable project. Under all circumstances routes through Dorval at 300 kms/h looked good.

The analysis was updated by Transport Canada using 2009 data.

From the point of view of the Canadian economy as a whole, the economic analysis showed that HSR between Quebec City and Windsor would not generate a positive net economic benefit. However, a project between Montreal, Ottawa and Toronto only could generate a positive net economic benefit at both 200 and 300 km/h.

Similar studies have been done on the prospect of high speed rail between Calgary and Edmonton.

Labour

Why public involvement in labour training? Why do companies and individuals not generate the right amount and the right kind?

- Credit imperfections (cannot borrow against potential future earnings)
- Externalities not captured by private firm and individual
- Social rate of return

Some observations from the OECD on labour training in Canada

https://www.oecd.org/canada/Employment-Outlook-Canada-EN.pdf

• Low skilled Canadians are less likely to undertake training. There are many reasons why people do not train, including a lack of time and training costs. In Canada the cost of training is an important barrier in particular for own-account workers. • In addition, having probably already experienced failure in education, lowskilled workers may be less willing to engage with, and have more difficulty navigating, the complex world of adult learning. • Older workers face similar challenges, as they may need extensive retraining in order to find a job. As an example to other countries, several programs in Canada focus specifically on older workers, including the federal-provincial Targeted Initiative for Older Workers (TIOW), and Ontario's Second Career Program.

"The poor stay poor, the rich get rich"

http://www.dataangel.ca/docs/CWF_LiteracyLost_December2018.pdf

Workers with the lowest skills are the least likely to be offered training by their employers, especially if their jobs are also low-skilled. Compounding the problem is that the likelihood of low-skilled jobs being automated or moved to other countries is growing; the need to upgrade skills in low-skilled workers is crucial. The good news is that recent analysis of international adult skills data and key macroeconomic performance indicators (GDP per capita and labour productivity) shows that increasing the literacy skills in the workforce by an average of 1% would, over time, lead to a 3% increase in GDP, or $54 billion per year, every year, and a 5% increase in productivity. This is up from a 2004 report that showed a gain of 1.5% and 2.5% respectively. What is more, this research also shows that **improving the skills of people at the lower end of the scale (Levels 1 and 2 on the five-level scale for literacy) will have more impact than improving the skills of people who are already at Level 3 or higher.** As the people most at risk of losing their entire job to automation are the people employed in low-skilled jobs, upgrading their skills would have the added advantage of making them more employable in a new higher-skilled job.

Despite externalities, there is considerable private sector training in Canada, although less than in some of our peers.

https://www.conferenceboard.ca/press/newsrelease/2018/01/31/canadian-employers-investment-in-employee-learning-and-development-continues-to-rise

According to The Conference Board of Canada's latest Learning and Development Outlook, Canadian employers spent, on average, $889 per employee on learning and development in 2016–17, an increase of $89 per employee since 2014-15. The average number of hours of learning per employee per year is also on the rise, increasing from 25 hours in 2010 to 32 hours in 2016–17.

Canadian organizations are now spending an average of 81 cents for every dollar spent by American organizations on learning and development, representing a significant increase in the overall average of 57 cents since 2006. While they are still lagging their counterparts in the U.S. on overall spending, Canadian employers are gaining ground and the gap has narrowed, partly as a result of reduced spending by American organizations.

While classroom learning remains the most common delivery method for formal learning, its prevalence is diminishing. Instructor-led classroom delivery used to consistently make up more than half of all learning time but has now dropped to 48 per cent in 2016–17. Meanwhile, informal learning is on the rise and Canadian organizations have indicated that this is a result of an increasing number of employees who initiate their own learning. Self-paced e-learning through online courses remains firmly established as a delivery method of choice, with more than three quarters of organizations offering it in some form.

Federal and provincial governments have training programs as well or provide spending or tax support for private training.

For example, the Canada Training Benefit was introduced in the 2019 Budget.

Canada Training Benefit. It's a program designed to provide Canadians with funding to help pay for retraining courses.

Every year, workers who are between the ages of 25 and 64 and who make between $10,000 and $150,000 will get a tax break for job retraining. They will earn a maximum tax credit of $250 a year, up to a lifetime limit of $5,000.

Training programs in general do not fare well on evaluation and benefit-cost tests.

One reason is the rather high administrative costs.

Another is the difficulty of training people with literacy challenges.

This leads to a debate whether training should focus on “job content” or be more general. And there is not likely the same answer for everyone.

It has proven particularly difficult to train **disadvantaged youth**. This suggests the need for much earlier intervention/support in their life, especially to ensure high school graduation.

Miles Corak finds the support needs to be ongoing, not just one shot. And communities and families need support as well.

Wage subsidies for employers do not tend to be successful because they have deadweight loss (free riders) and substitution effects.

Training tends to work better if it has an on-the-job component. This in turn requires local employer involvement.

Education is a good predictor of success/failure in training.

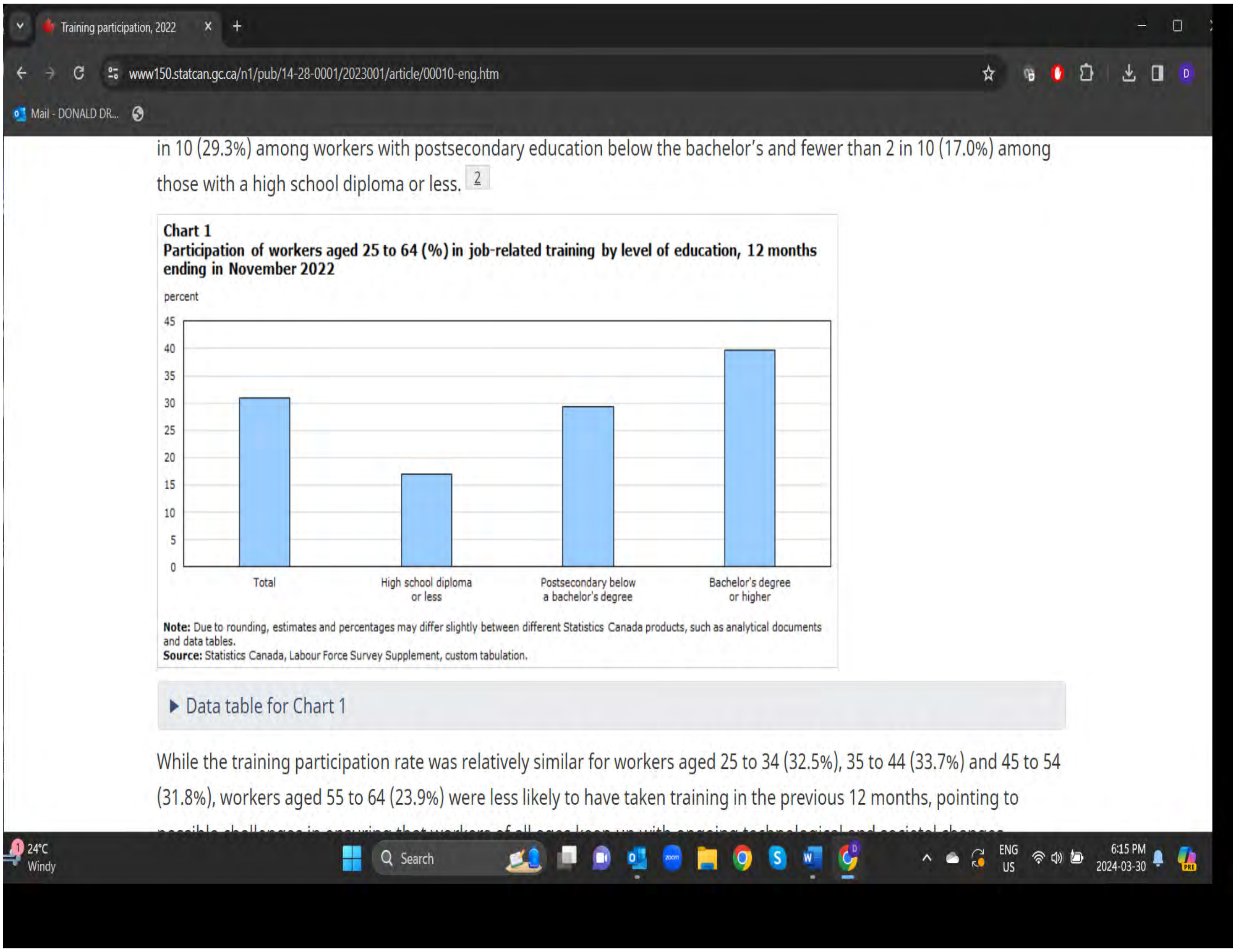
Zero-to-negative returns for training out-of-school youth

Zero to small returns for training men

Better returns for training women

Better results with displaced workers than disadvantaged workers

Having a certificate that is recognized by employers helps.



Labour Market Information

- Has been weak in Canada for a long time
- Some improvements of late
- But still tends to focus on jobs/occupations rather than skills

https://thebusinesscouncil.ca/wp-content/uploads/2016/06/Labour-Market-Information-June-13.pdf

https://irpp.org/research-studies/wanted-good-canadian-labour-market-information/

http://flmm-fmmt.ca/wp-content/uploads/2017/02/Working-Together-to-Build-a-Better-Labour-Market-Information-System-for-Canada-Final-Report.pdf

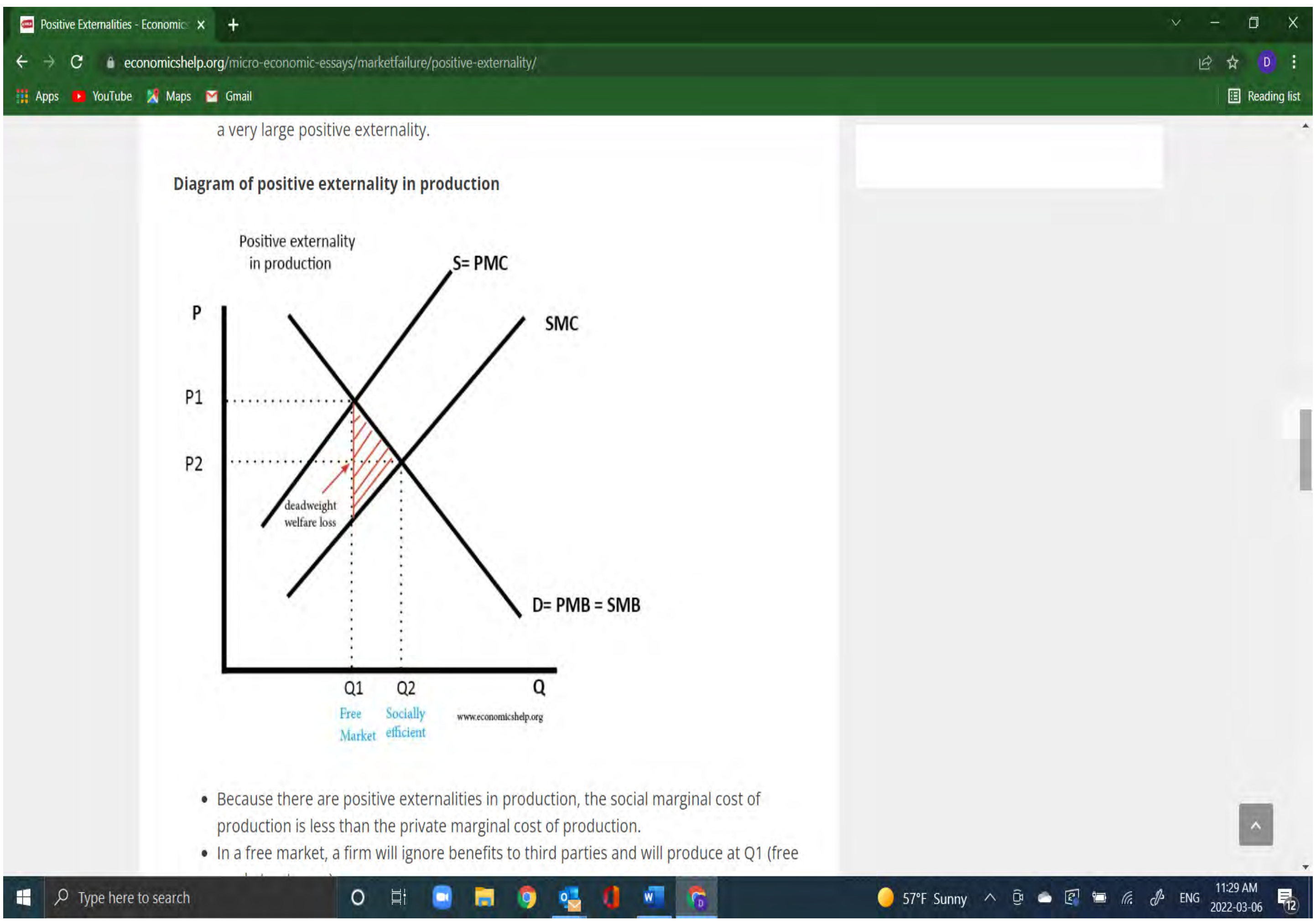
MPA 887

Reforming Public Services

Summer 2024

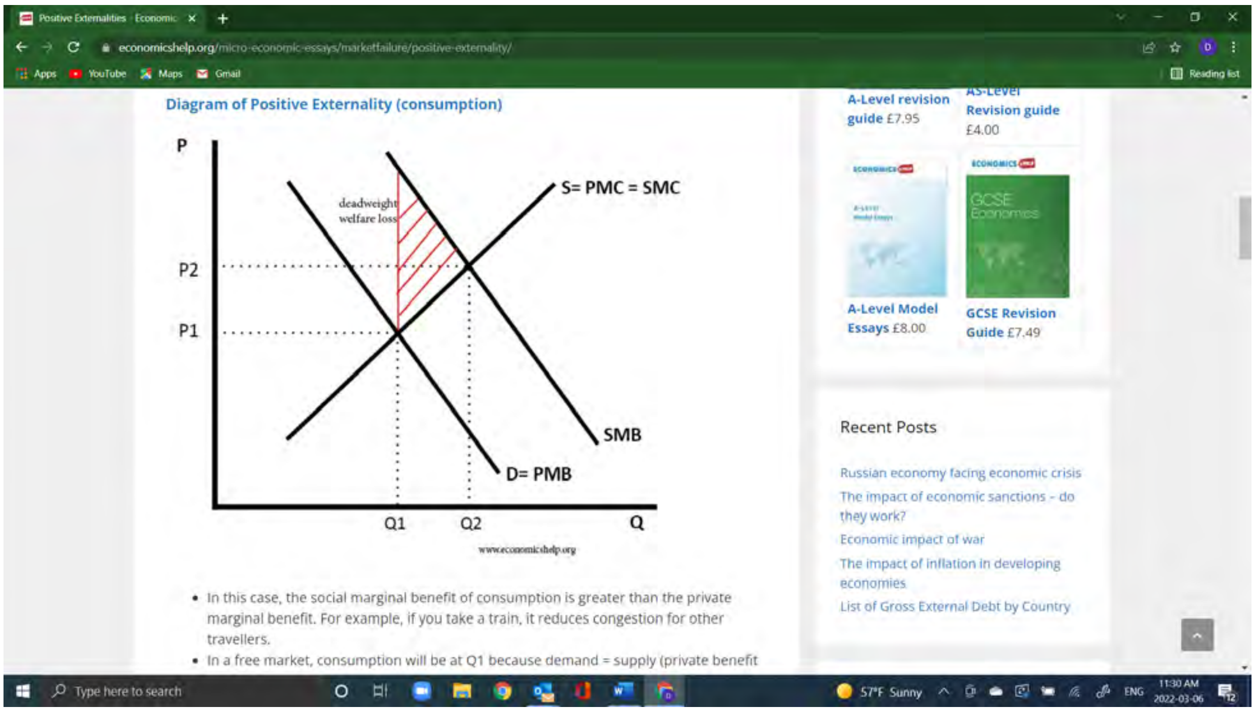
Environment

Environmental policy is largely about “externalities”.



Supply of goods and services reflects private costs. But the “social cost” may be higher because of negative externalities. The intersection of private demand and supply produces a price that is too low and a supply that is too high. Accounting for the social cost, through a tax for example, raises the price and lowers the quantity produced and consumed.

Similarly, private demand for a product may not reflect a positive externality. Hence the price is too low and the quantity too low. Capturing the social demand leads to a higher price and a higher quantity.



Many dimensions of the environment.

Clean air.

Greenhouse gas emissions.

Clean water.

Species at risk

Solid waste

Traffic congestion

Et cetera.

We cannot cover all dimensions here. We will focus on **greenhouse gas emissions and climate change** in the interest of being illustrative of how to approach environmental issues.

Recall here the 4 basic tools of public policy:

Moral suasion

Taxation

Government spending

Regulation

Some examples of economic instruments for the environment.

Technology standards

Performance standards

Performance standards with trading or offsets

Cap and trade

Environmental tax

Subsidy incentive

Voluntary compliance

Note a key distinction between cap and trade and an environment tax such as a carbon tax.

Cap and trade gives certainty on the quantity of pollution (GHGs for example) but uncertainty on the price

A tax gives certainty on the price but uncertainty on the quantity of pollution

Arguments in favour of economic instruments:

Greater flexibility/choice

Lower total costs

Greater innovation

Revenue opportunity (which can be used for environment or other needs of society including lower taxes on other things)

Efficient allocation of rights to scarce resources

With an **environmental tax**, producers will implement abatement that costs less at the margin than the tax. The market finds the cheapest abatement means, minimizing the cost to the economy.

With an **environmental subsidy**, it is hard to establish the appropriate level of pollution. The incidence is wrong because the polluter does not pay. There can be powerful unintended consequences. For example, a European subsidy to convert to palm oil led to clear-cutting in Indonesia and Malaysia. One needs to look at the full circle.

Free-rider problem with subsidies. Consider transit pass subsidy. Most people receiving the subsidy were already and would have without the subsidy used public transit. Literally, free riders. Federal (never published) estimates of $100-2000 per tonne of emissions reduced.

Ethanol is popular for attracting government subsidies. But after considering the cost of fertilizer et cetera, it is not a net improvement to the environment. Better to think of it as a subsidy to farmers.

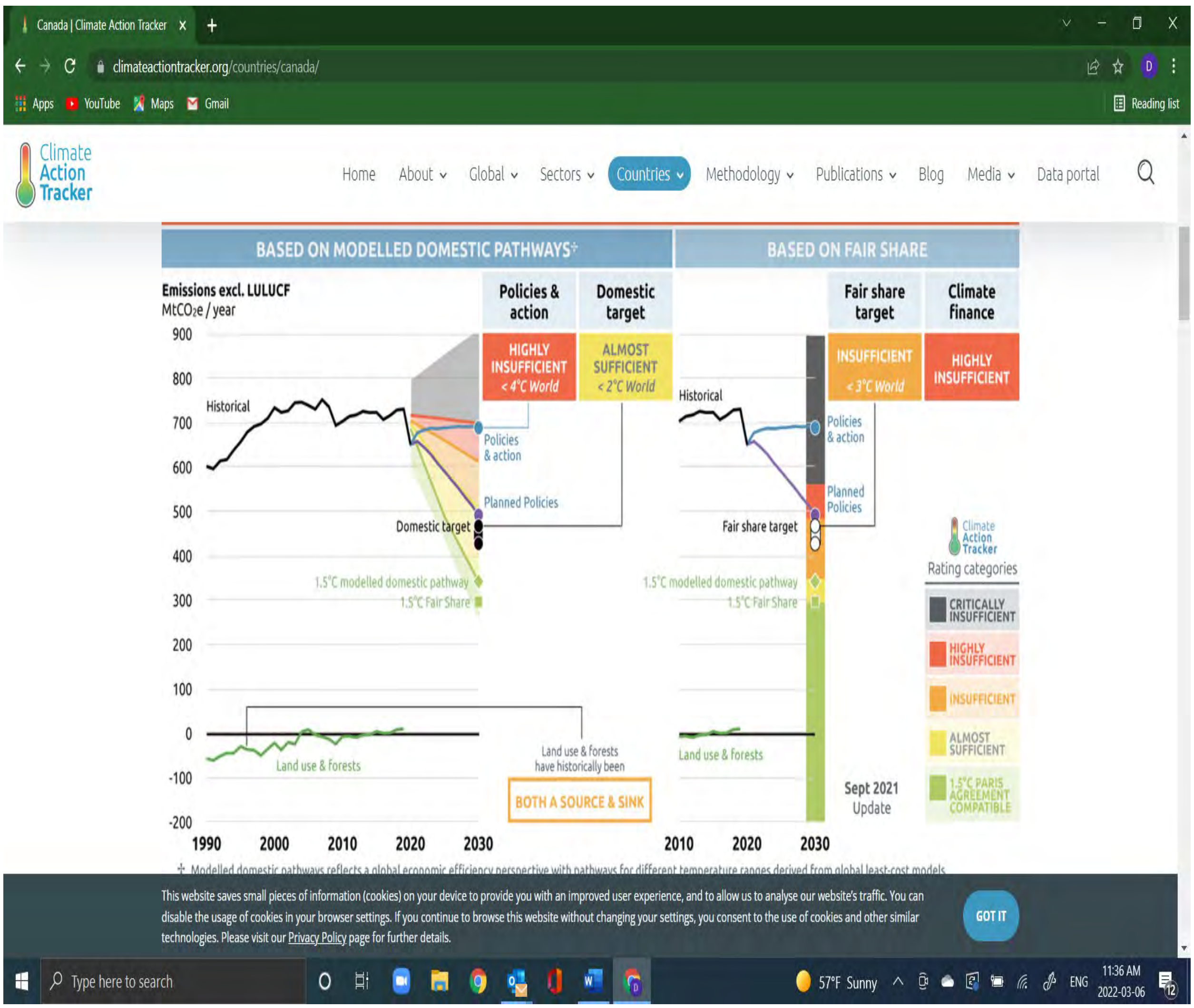
EcoFiscal Commission estimates that reducing GHGs through subsidies to ethanol and biodiesel costs $180-185 per tonne for ethanol and $120-165 for biodiesel. Very inefficient relative to other approaches.

An EcoFiscal Commission study of Quebec's subsidy for electric cars estimated emissions were reduced at a cost of $395 per tonne.

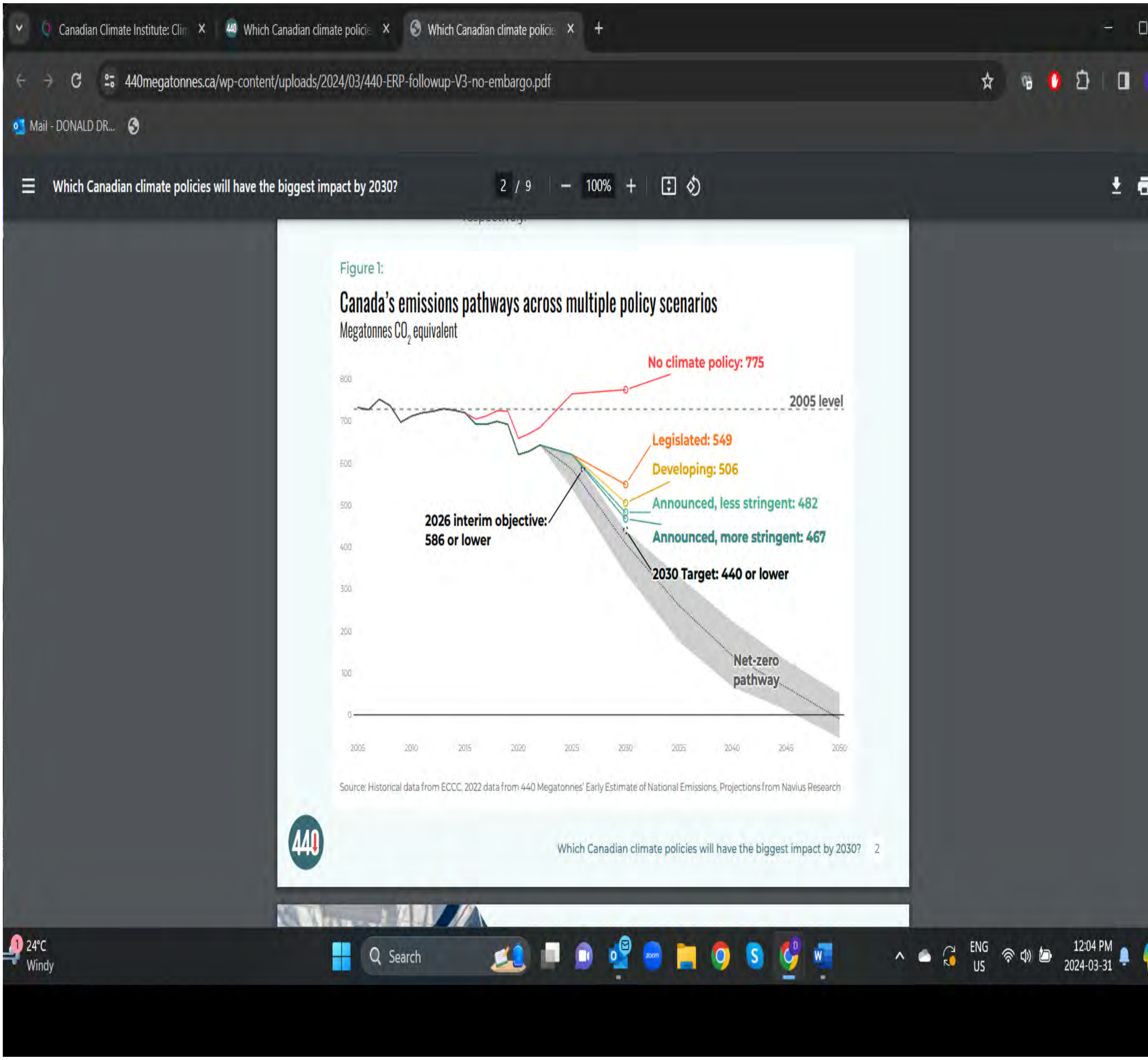
Command and control (regulation) is not related to the cost of abatement. It provides no advantage to efficient firms. It gives no incentive to innovate to drive pollution below the control level.

Smart regulation designed to lower costs. Set the objective but not the means of achieving the objective. Clean fuel rules such as low carbon fuel standard in British Columbia. Zero emission vehicle standard in California. Fleet gas mileage rules. Do not prescribe the technology. Allows trading.

They have all been used to address environmental issues.



In the absence of policy changes, GHGs were expected to rise considerably. Policies introduced (or at least planned) are expected to reduce emissions but there remains an expected gap to the 2030 target.


Canadian Climate Institute: Clim
Which Canadian climate policie
Which Canadian climate policie
440megatonnes.ca/wp-content/uploads/2024/03/440-ERP-followup-V3-no-embargo.pdf
Mail - DONALD DR...
Which Canadian climate policies will have the biggest impact by 2030?
2 / 9
100%
Figure 1:
Canada's emissions pathways across multiple policy scenarios
Megatonnes CO_2 equivalent
No climate policy: 775
2005 level
Legislated: 549
Developing: 506
Announced, less stringent: 482
Announced, more stringent: 467
2026 interim objective: 586 or lower
2030 Target: 440 or lower
Net-zero pathway
800
700
600
500
400
300
200
100
0
2005
2010
2015
2020
2025
2030
2035
2040
2045
2050
Source: Historical data from ECCC. 2022 data from 440 Megatonnes' Early Estimate of National Emissions. Projections from Navius Research
440
Which Canadian climate policies will have the biggest impact by 2030? 2
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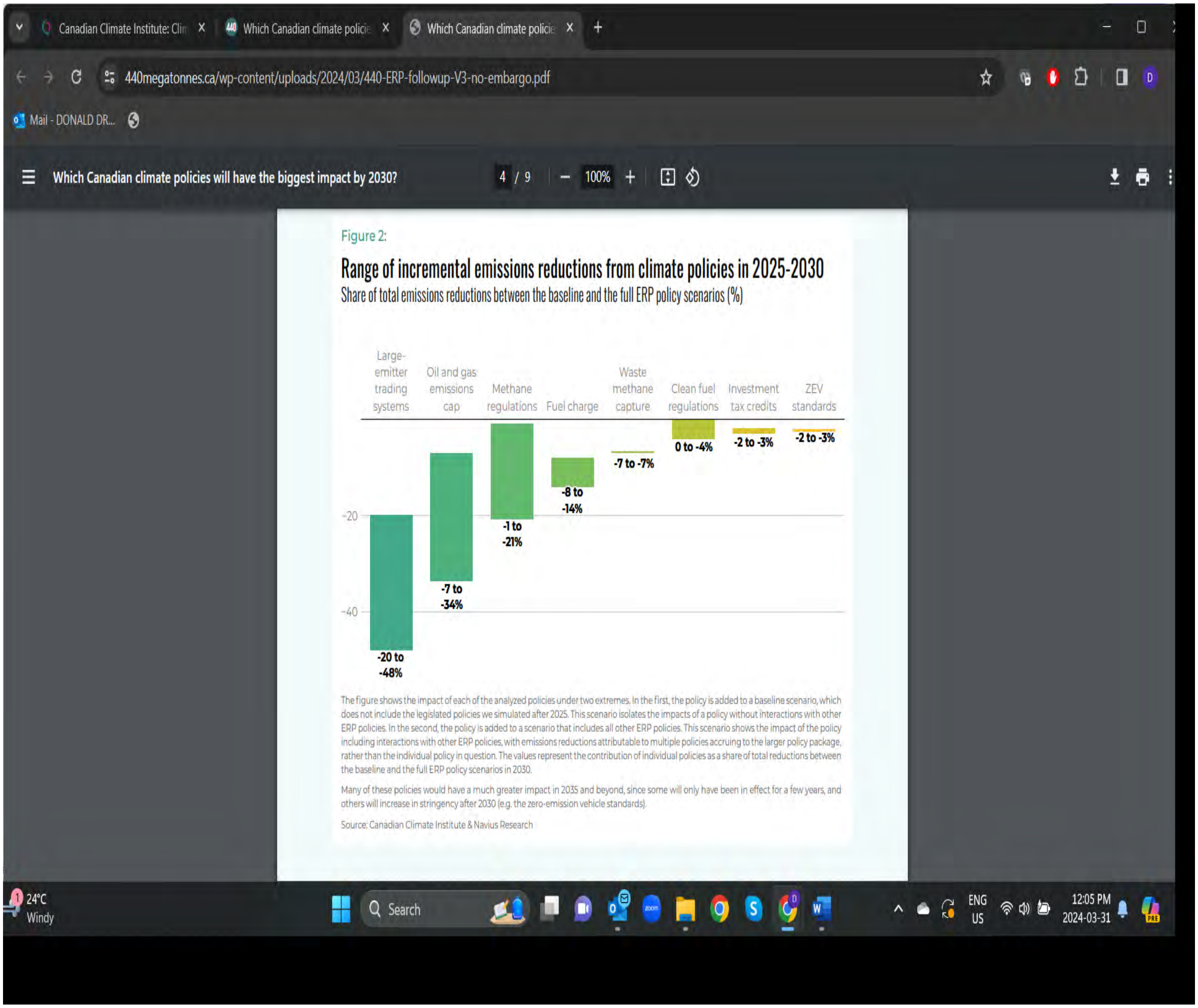


A brief and selective history of trying to reduce GHGs n Canada

1992 First serious international discussions in Rio.

1997 Kyoto Accord. Canada agrees to reduce emissions 6 per cent below 1990 level by 2008-2012. Never implements or even designs policies to do so. Instead, emissions rise 24.1 per cent by 2008. Whoops.

Opposition just as bad. Liberals introduced a private member's bill in 2006 to force adherence to Kyoto targets. Impossible! No credibility.

2009/10. TD Economics partners with Pembina and David Suzuki Foundation to show existing polices will not come close to hitting emissions targets. Adds a provincial dimension which of course shows potential costs highest in carbon-intensive areas (but to a degree can be handled through revenue recycling. Vicious federal and provincial reaction.

Kyoto Accord officially abandoned.

National Roundtable on Environment and Economy closed in 2012 following a report showing existing policies were not going to reduce emissions to target.

Liberal Government elected in 2015 and introduced a new plan. But will still fall short of targets. Some provinces challenging in the Supreme Court the federal authority to apply a carbon tax.

December 2020, Canadian federal government releases most complete environment plan. But loose association to economy. And much left unspecified (like timing to carbon tax of $170 per tonne).

https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/healthy-environment-healthy-economy.html

2021 Supreme Court rules federal imposition of carbon levies in provinces is permitted under the constitution.

EcoFiscal Commission 2015 – 19

Motto "Put a Price On It"

Reject to notion that economic growth and the environment are substitutes and one might be chosen over the other.

Box B: Why advocate for clean growth?

By Dr. Richard Lipsey, Clean Growth Expert Panelist and Professor Emeritus at Simon Fraser University

The Canadian Institute for Climate Choices is dedicated to studying policies for clean growth—policies that encourage the advantages of economic growth while mitigating its undesirable side effects. This implies that we believe that cleaning and growing the economy are both possible and desirable.

There are those that will disagree with us. Some disagree on whether clean growth is possible, while others disagree on whether it is desirable. Those who deny the possibility argue there is a trade off in which you can have more of one but only at the cost of less of the other. A more extreme position is held by those who deny the desirability of maintaining a growing economy, arguing that modern growth has been harmful on balance so that if it is slowed or stopped as a consequence of greening the economy, so much the better.

We reject both these views. On balance, growth has benefited all societies. We also observe that countries such as Sweden that have steadily reduced greenhouse gas emissions have also been successful in producing growing economies combined with high levels of wellbeing.

Growth is mainly driven by new technologies: new ways of making existing products, creating new products, and new forms of organising production, distribution, and finance.

People living in the first decade of the 20th century did not know modern dental and medical equipment, penicillin, bypass operations, safe births, control of genetically transmitted diseases, personal computers, compact discs, television sets, automobiles, opportunities for fast and cheap world-wide travel, affordable universities, central heating, air conditioning, and food of great variety free from ptomaine and botulism, much less the elimination of endless kitchen drudgery through the use of detergents, washing machines, electric stoves, vacuum cleaners, refrigerators, dish washers, and a host of other labour-saving household products that their great grandchildren take for granted. These new technologies also removed terrible diseases that maimed, crippled, and killed—plague, tuberculosis, cholera, dysentery, smallpox, and leprosy, to mention only the most common.

Those of us who are living through the first decades of the 21st century are seeing similarly massive changes but in different directions: biotechnology, nanotechnology, artificial intelligence, and clean technology. If technological change and the growth that it drives continues, we can look forward to such things as longer and healthier lifespans, ending the scourge of many inherited diseases, replacement of body parts that function at the command of artificial intelligence, ending deafness, innovating new environmentally friendly materials, and new energy sources that bring an end to the age of fossil fuels.

Modern growth and globalisation have benefitted the world as a whole, raising billions from poverty to middle class standards. But there have also been undesirable side effects. Unskilled workers in advanced countries were hurt as they transitioned from being relatively scarce locally to relatively plentiful globally. Environmental damages, including greenhouse gas emissions, have also increased. These undesirable side effects need to be ameliorated by public policy, not by throwing the baby out with the bath water and stopping growth.

These ameliorating policies need to be an important element of clean growth. We who live today can be thankful that some earlier-day Luddite did not persuade governments to stop growth-inducing technological change decades ago; just as our children and grandchildren will be grateful that we did not slow or halt the pace of the technological change from which they will benefit 50 or 100 years from now.

Least economic cost of hitting GHG emissions target is through carbon pricing with dividends (i.e. recycling revenue raised by the tax).

Carbon pricing is still the best way we have to support low-carbon economic growth

RICHARD LIPSEY

CONTRIBUTED TO THE GLOBE AND MAIL

PUBLISHED MARCH 28, 2024

FOR SUBSCRIBERS

Richard G. Lipsey is emeritus professor of economics at Simon Fraser University and has been an economic adviser to federal and provincial governments. This piece is adapted from an open letter signed by more than 250 economists.

As an economist, I have spent much of my career studying economic growth. Now

with climate change posing a significant environmental and economic threat, I support climate policies that reduce emissions at a low cost, address affordability concerns, maintain business competitiveness and support the country's transition to a low-carbon economy.

Canada's carbon-pricing policies do all those things.

There is a lot of debate – and misinformation – about carbon pricing in Canada. Let's examine some of the critics' claims and compare them with the evidence.

Claim: Carbon pricing won't reduce greenhouse gas emissions.

The evidence clearly shows that pricing does reduce emissions at a lower cost than other approaches. Carbon pricing works because when something costs more, people use less of it.

Since federal carbon pricing took effect in 2019, Canada's GHG emissions have fallen by nearly 8 per cent. A recent study by the Canadian Climate Institute shows that carbon pricing for industries and consumers is expected to account for almost half of Canada's emissions reductions by 2030.

Carbon pricing is the cheapest approach because it gives people and businesses flexibility to choose the best way to reduce their carbon footprint. Other methods, such as regulation, are usually more intrusive and inflexible, and cost more.

The more we use low-cost policies to achieve our climate goals, the more resources we will have for other things such as health care and education.

Claim: Carbon pricing drives up the cost of living and is a major cause of inflation.

The evidence shows that Canadian carbon pricing has had a negligible impact on inflation.

The sharp increase in inflation from 2021 to 2023 was caused by factors mainly related to the COVID-19 pandemic and the Russia-Ukraine war. These factors are global, which is why most advanced countries – even ones with no carbon price – have experienced similar inflation. According to the Bank of Canada, carbon pricing has directly caused less than one-twentieth of Canada's inflation in the past two years.

That is because the policy is designed to avoid raising the cost of living. About 90 per cent of federal carbon price revenues are given back to households. Most families receive more in rebates than they pay in carbon pricing, particularly those with low or medium incomes. Rural residents get an additional rebate.

Climate change, though, does threaten Canadians' economic well-being – for example, by increasing the risk and severity of natural disasters. These consequences will cost our economy at least $35-billion by 2030.

Claim: It makes little sense to have both a carbon price and rebates.

The evidence shows that the price-and-rebate approach gives an incentive to reduce carbon emissions, while maintaining most households' overall purchasing power.

Carbon pricing raises the cost of carbon-intensive products, so consumers and businesses are encouraged to adopt lower-carbon options, such as smart thermostats, heat pumps or hybrid/electric vehicles.

Giving back most of the carbon-pricing revenues in rebates doesn't undermine this goal; consumers still have the incentive to reduce emissions. The rebates ensure that most households come out ahead, because they receive an amount back that is slightly above what the average household spends on carbon pricing.

Claim: Carbon pricing harms Canadian business competitiveness.

The evidence shows that Canada's carbon-pricing scheme is designed to help businesses reduce emissions at low cost, while competing in the emerging low-carbon global economy.

Large emitting industries, such as oil, steel and cement, have an “output-based” carbon pricing system. It gives firms a strong incentive to reduce emissions, while maintaining their international competitiveness, so they can stay profitable and generate jobs in Canada. Pricing also stimulates innovation, by encouraging the development and adoption of low-carbon technologies.

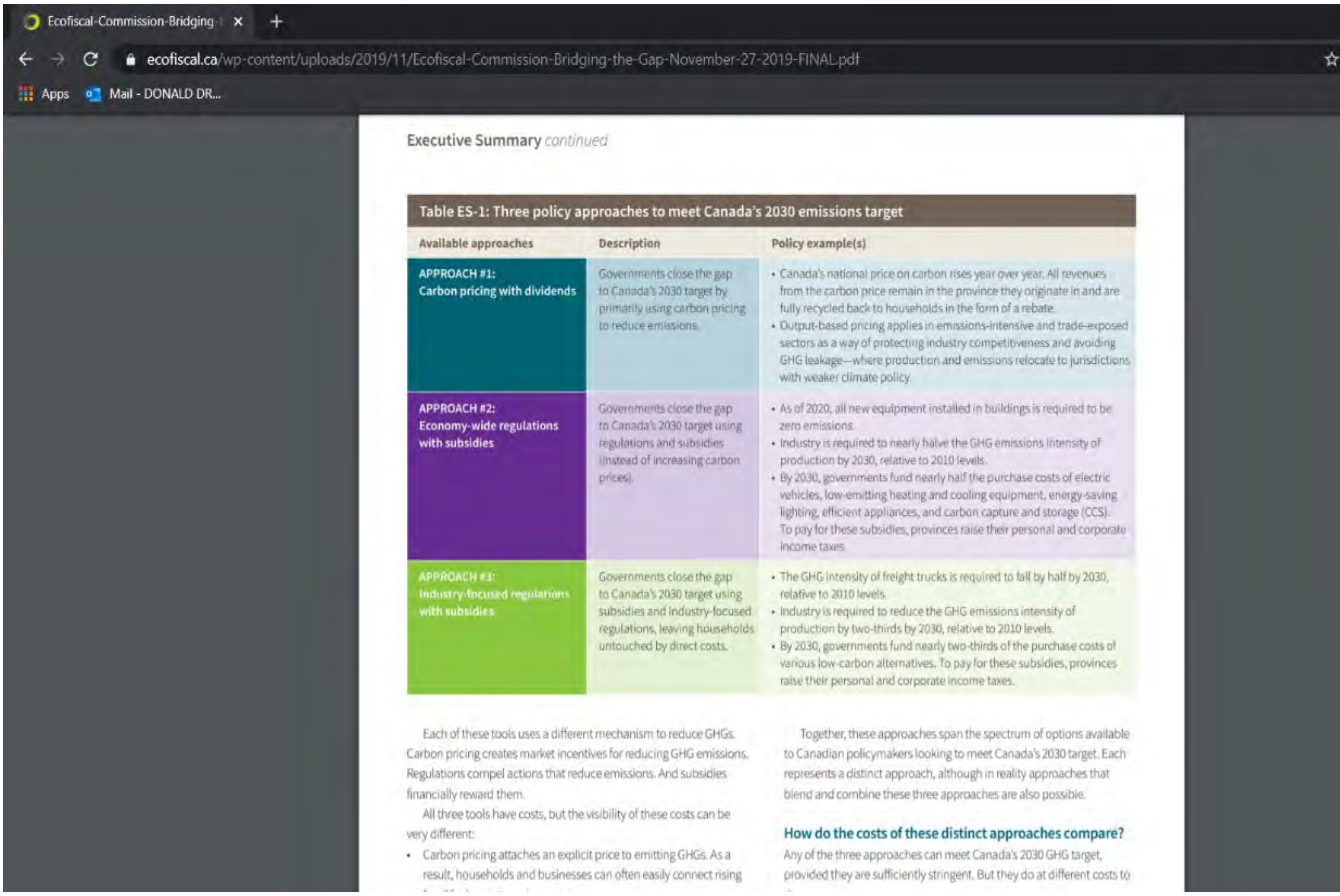
Claim: Carbon pricing isn’t necessary.

The critics are right on this point, at least in part. Canada could abandon carbon pricing and still hit our climate targets by using other types of regulations and subsidies – but it would cost much more.

The most vocal opponents of carbon pricing, though, are not offering alternative policies to reduce emissions and meet our climate goals – let alone ones that would do so at the same low cost as carbon pricing.

In a world of scarce resources, it seems unwise to abandon carbon pricing only to replace it with more costly methods of reducing emissions – or, worse, take no measures at all.

In short, carbon pricing is the lowest-cost way to reduce emissions, drive green innovation and support Canada’s transition to a clean, prosperous economic future. Public debate about carbon pricing is good, but it must be based on sound evidence.



Ecofiscal-Commission-Bridging-

ecofiscal.ca/wp-content/uploads/2019/11/Ecofiscal-Commission-Bridging-the-Gap-November-27-2019-FINAL.pdf

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Executive Summary *continued*

Table ES-1: Three policy approaches to meet Canada's 2030 emissions target

Available approaches	Description	Policy example(s)
APPROACH #1: Carbon pricing with dividends	Governments close the gap to Canada's 2030 target by primarily using carbon pricing to reduce emissions.	• Canada's national price on carbon rises year over year. All revenues from the carbon price remain in the province they originate in and are fully recycled back to households in the form of a rebate. • Output-based pricing applies in emissions-intensive and trade-exposed sectors as a way of protecting industry competitiveness and avoiding GHG leakage—where production and emissions relocate to jurisdictions with weaker climate policy.
APPROACH #2: Economy-wide regulations with subsidies	Governments close the gap to Canada's 2030 target using regulations and subsidies (instead of increasing carbon prices).	• As of 2020, all new equipment installed in buildings is required to be zero emissions. • Industry is required to nearly halve the GHG emissions intensity of production by 2030, relative to 2010 levels. • By 2030, governments fund nearly half the purchase costs of electric vehicles, low-emitting heating and cooling equipment, energy-saving lighting, efficient appliances, and carbon capture and storage (CCS). To pay for these subsidies, provinces raise their personal and corporate income taxes.
APPROACH #3: Industry-focused regulations with subsidies	Governments close the gap to Canada's 2030 target using subsidies and industry-focused regulations, leaving households untouched by direct costs.	• The GHG intensity of freight trucks is required to fall by half by 2030, relative to 2010 levels. • Industry is required to reduce the GHG emissions intensity of production by two-thirds by 2030, relative to 2010 levels. • By 2030, governments fund nearly two-thirds of the purchase costs of various low-carbon alternatives. To pay for these subsidies, provinces raise their personal and corporate income taxes.

Each of these tools uses a different mechanism to reduce GHGs. Carbon pricing creates market incentives for reducing GHG emissions. Regulations compel actions that reduce emissions. And subsidies financially reward them.

All three tools have costs, but the visibility of these costs can be very different:

- Carbon pricing attaches an explicit price to emitting GHGs. As a result, households and businesses can often easily connect rising

Together, these approaches span the spectrum of options available to Canadian policymakers looking to meet Canada's 2030 target. Each represents a distinct approach, although in reality approaches that blend and combine these three approaches are also possible.

How do the costs of these distinct approaches compare?

Any of the three approaches can meet Canada's 2030 GHG target, provided they are sufficiently stringent. But they do at different costs to

Pricing can also be used to (effectively and efficiently) address other environmental issues such as road congestion (road/bridge/parking tolling) and solid waste (user fees).

Offers a different perspective of things like public transit. Must public transit be heavily subsidized? There is certainly an argument for some subsidy. This is an example where private demand is less than social demand because individuals do not account for the positive externality. But a good reason it seems to be heavily subsidized almost everywhere is because private transportation is subsidized. Drivers do not pay the full (social) cost. Residents in low density suburbs do not pay the full cost of urban sprawl.

Solid Waste

https://ecofiscal.ca/wp-content/uploads/2018/10/Ecofiscal-Commission-Solid-Waste-Report-Cutting-the-Waste-October-16-2018.pdf

On average, each Canadian throws out about 400 kilograms of solid waste each year, most of which ends up in landfills. When factoring in commercial waste, this figure rises to nearly one tonne of waste generated for each Canadian—nearly double the amount of waste generated by those in other high-income countries. Canadians make up 0.5% of the world's population yet produce about 2% of the world's municipal solid waste.

RECOMMENDATION #1 Municipalities should charge tipping fees that reflect the full costs of disposal, including environmental costs

RECOMMENDATION #2 Municipalities should implement pay-as-you-throw programs and charge households directly for waste disposal

RECOMMENDATION #3 Provincial governments should expand, reform, and harmonize extended producer responsibility programs

RECOMMENDATION #4 Provincial and municipal governments should implement policies that improve how organic waste is separated and managed, designed according to their own context While EPR programs can

RECOMMENDATION #5 To improve the evaluation, assessment, and transparency of waste management policies, federal and provincial governments should expand and standardize data-collection methods and make these data more available to the public.

Do people and businesses respond to putting a price on garbage?

Experience shows that when partial- or full-unit pricing mechanisms are introduced, the amount of disposed residential waste declines by 8 percent-to-38 percent, and the amount recycled increases by as much as 6 percent in mature systems to 40 percent in newer recycling programs.

http://kelleherenvironmental.com/wp-content/uploads/2012/07/commentary_213.pdf

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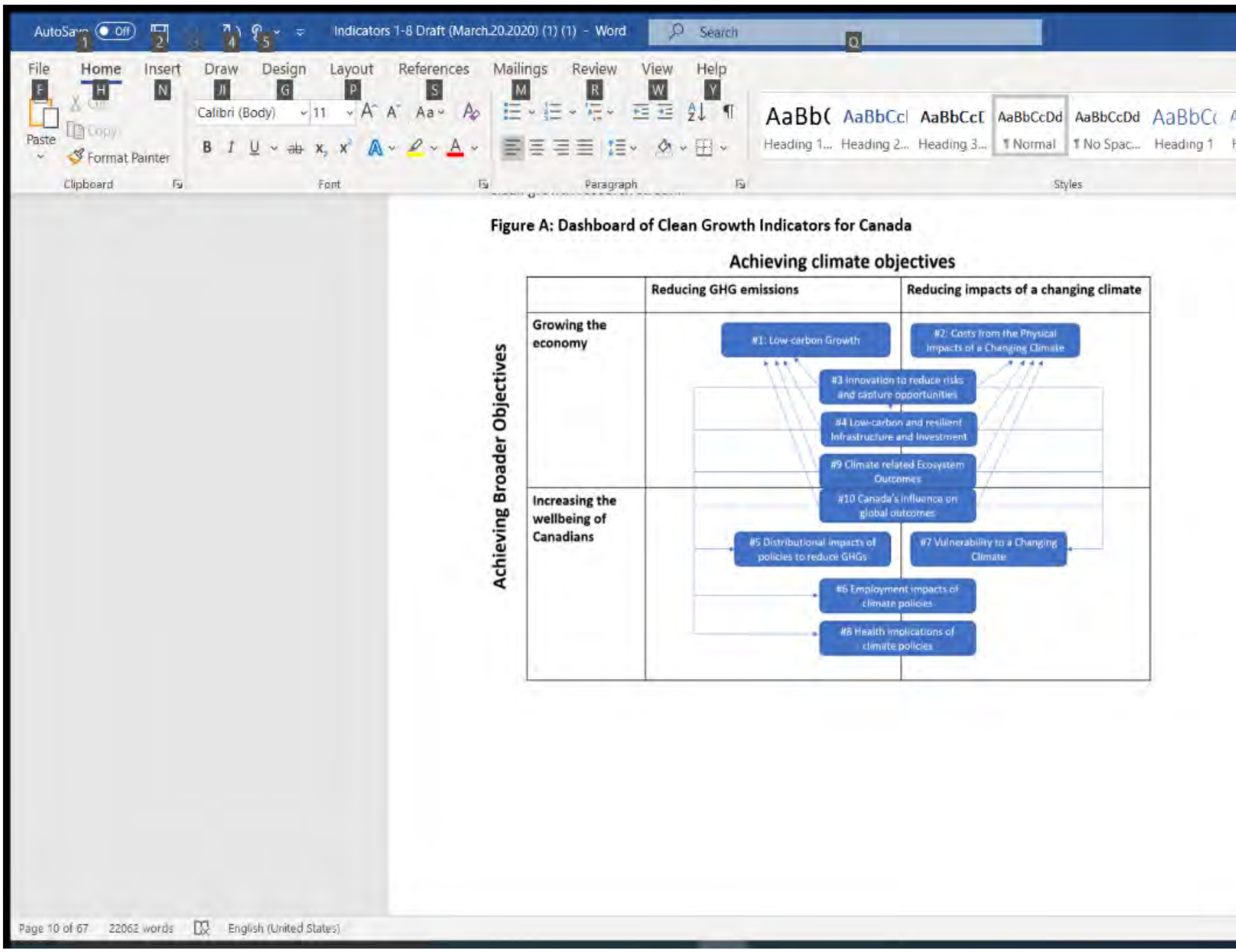
Clean Growth

- Attempt to define the notion economic growth (of the "right" sort) can be compatible with a sound environment and vice versa.
- How would one measure whether growth is clean.
- Early attempt by the Institute for Climate Choices



Note there are similarities to the Index of Well Being.

Canadian Climate institute

Endowed by the federal government. To analyze mitigation, adaptation and clean growth.

"Sink or Swim" lays out the transformation the Canadian economy must undergo to achieve net zero emissions.

https://climatechoices.ca/wp-content/uploads/2021/10/ICCC-Summary-Report-Sink-or-Swim-English-Final-High-Res.pdf

HOW DO WE RIDE THE WAVE?

Governments have a major role to play in helping ensure strong economies in thriving communities. Our recommendations focus on four priorities for government action:

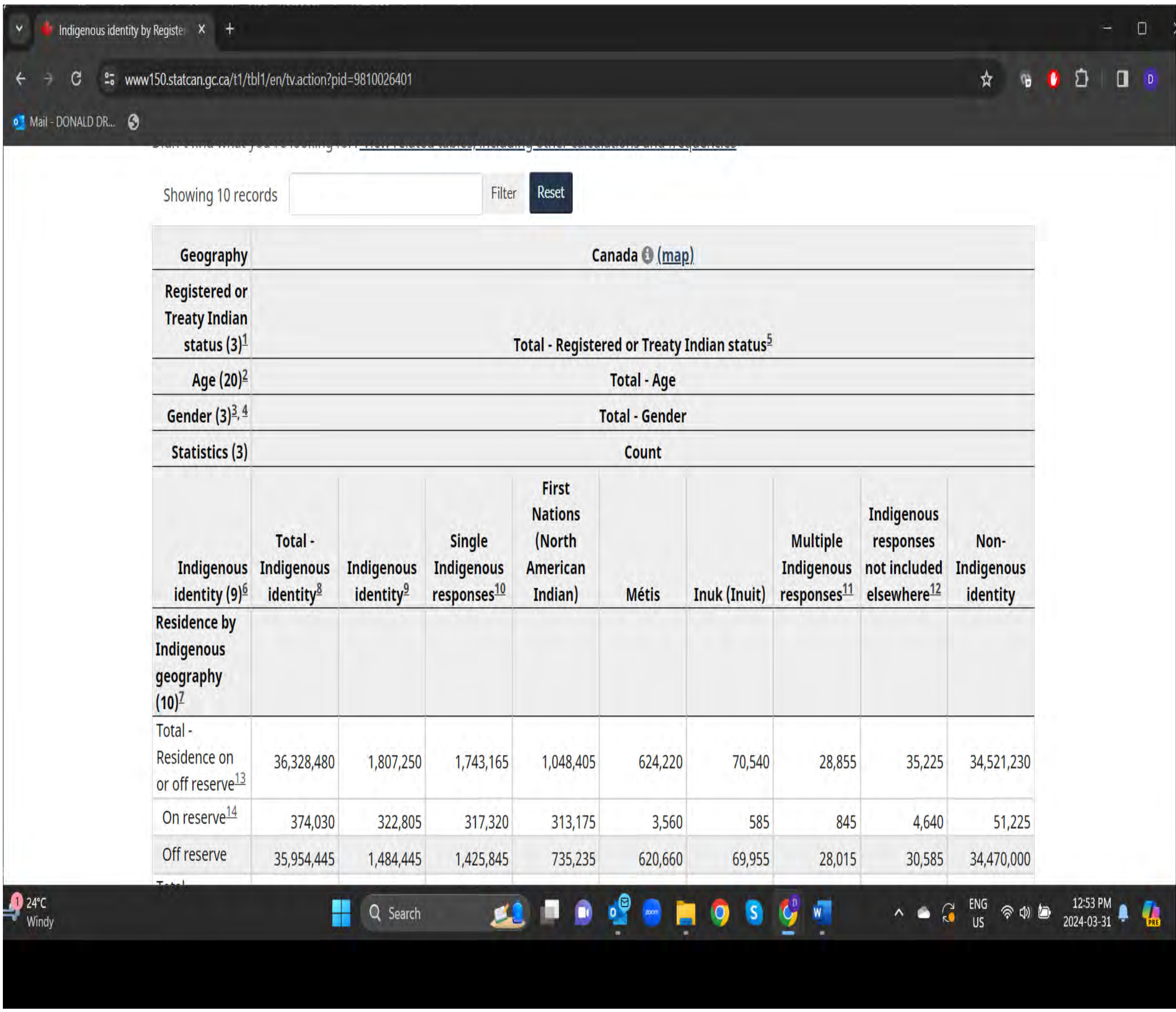
- Prioritize forward-looking decision making that considers the competitive benefits of climate action
- Emphasize future-fit innovation and economic development that supports growth in markets where global demand will be strong
- Develop local and people-focused transition plans that drive new areas of job creation, improve the resilience of the workforce and empower Indigenous economic leadership; and
- Mandate the disclosure of climate-related metrics that are decision-useful, building on international approaches to close gaps and mobilize private investment

MPA 887

Reforming Public Services

Summer 2024

Indigenous Issues



Geography	Canada (map)									
Registered or Treaty Indian status (3)[1]	Total - Registered or Treaty Indian status[5]									
Age (20)[2]	Total - Age									
Gender (3)[3, 4]	Total - Gender									
Statistics (3)	Count									
Indigenous identity (9)[6]	Total - Indigenous identity[8]	Indigenous identity[9]	Single Indigenous responses[10]	First Nations (North American Indian)	Métis	Inuk (Inuit)	Multiple Indigenous responses[11]	Indigenous responses not included elsewhere[12]	Non-Indigenous identity	
Residence by Indigenous geography (10)[7]										
Total - Residence on or off reserve[13]	36,328,480	1,807,250	1,743,165	1,048,405	624,220	70,540	28,855	35,225	34,521,230	
On reserve[14]	374,030	322,805	317,320	313,175	3,560	585	845	4,640	51,225	
Off reserve	35,954,445	1,484,445	1,425,845	735,235	620,660	69,955	28,015	30,585	34,470,000	

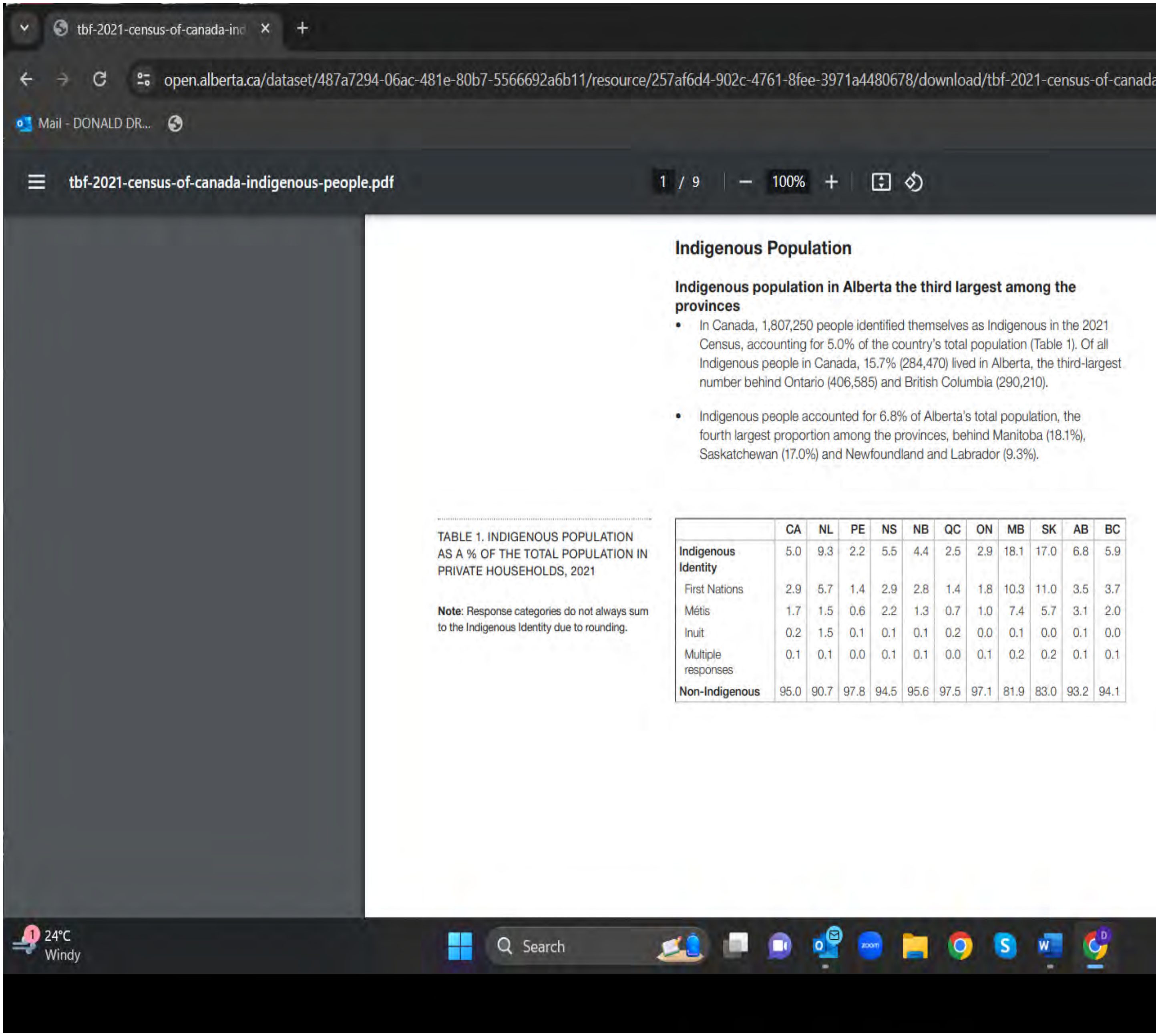
The Indigenous population grew by 9.4% from 2016 to 2021, surpassing the growth of the non-Indigenous population over the same period (+5.3%). However, this growth was not as rapid as in years past. For example, from 2011 to 2016, the Indigenous population grew by 18.9%—more than double the 2021 growth rate.

The Indigenous population was 8.2 years younger, on average, than the non-Indigenous population overall. Just over one in six working-age Indigenous people (17.2%) were "close to retirement" (55 to 64 years), compared with 22.0% of the non-Indigenous population.

Indigenous people were more likely than the non-Indigenous population to be living in a dwelling that was in need of major repairs (16.4% versus 5.7%) or live in crowded housing (17.1% versus 9.4%) in 2021.

In 2021, almost one in five Indigenous people in Canada (18.8%) lived in a low-income household, using the low-income measure, after tax. This was down nearly 10 percentage points from 2016. The decline was likely driven by government transfers in response to the COVID-19 pandemic.

In Canada, 237,420 Indigenous people could speak an Indigenous language well enough to conduct a conversation. While the number of people with an Indigenous mother tongue has been in decline, there has been growth in the number of Indigenous second-language speakers.



Indigenous Population

Indigenous population in Alberta the third largest among the provinces

- In Canada, 1,807,250 people identified themselves as Indigenous in the 2021 Census, accounting for 5.0% of the country's total population (Table 1). Of all Indigenous people in Canada, 15.7% (284,470) lived in Alberta, the third-largest number behind Ontario (406,585) and British Columbia (290,210).
- Indigenous people accounted for 6.8% of Alberta's total population, the fourth largest proportion among the provinces, behind Manitoba (18.1%), Saskatchewan (17.0%) and Newfoundland and Labrador (9.3%).

TABLE 1. INDIGENOUS POPULATION AS A % OF THE TOTAL POPULATION IN PRIVATE HOUSEHOLDS, 2021

Note: Response categories do not always sum to the Indigenous Identity due to rounding.

	CA	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC
Indigenous Identity	5.0	9.3	2.2	5.5	4.4	2.5	2.9	18.1	17.0	6.8	5.9
First Nations	2.9	5.7	1.4	2.9	2.8	1.4	1.8	10.3	11.0	3.5	3.7
Métis	1.7	1.5	0.6	2.2	1.3	0.7	1.0	7.4	5.7	3.1	2.0
Inuit	0.2	1.5	0.1	0.1	0.1	0.2	0.0	0.1	0.0	0.1	0.0
Multiple responses	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.2	0.1	0.1
Non-Indigenous	95.0	90.7	97.8	94.5	95.6	97.5	97.1	81.9	83.0	93.2	94.1

Housing

- First Nations are experiencing a housing crisis with approximately 85,000 housing units required across Canada. In many cases multiple families live in one and two bedroom homes.
- Almost half of the existing housing stock needs major repairs and another fifteen percent require outright replacement.

- About twenty-five percent of First Nations adults live in over-crowded housing, compared to less than ten percent of adults in the general Canadian population.
- Almost forty percent of First Nations adults report that their home is in need of major repairs.
- Of the 88,485 houses on-reserve, 5,486 are without sewage services.
- Mould and mildew contaminate half of all First Nation households.
- Over ten percent of First Nation communities have to boil their drinking water, impacting about 75,000 citizens.
- More than one-third of First Nations adults do not consider their main water supply in their home to be safe for drinking year round.
- First Nations youth reported living in households with an average of about 6 people, compared to an average of about 3 people in the general Canadian household.

2. Education

- In 2006, sixty-one percent of First Nations young adults aged 20 to 24 had not completed high school, compared with thirteen percent of non-Aboriginal Canadians.
- About forty percent of First Nations adults did not graduate from high school.
- The K-12 completion rate for First Nations students living on-reserve is forty-nine percent.
- First Nations students are more likely to end up in jail than graduate from high school.
- There are 40 First Nations communities without schools, and there are First Nations communities where children haven't been to school in more than two years.
- First Nations students attending on-reserve schools are funded at a rate of $3,000 to $7,000 less than students attending other schools in Canada.

- Only five percent of First Nations adults report completing a university undergraduate, graduate or professional degree, compared to about twenty-three percent of the general Canadian population.

3. Health

- Tuberculosis among First Nation citizens living on-reserve is 31 times the national average.

- One in five First Nations is diabetic–that's three to five times the national average.
- Approximately twenty-five percent of on-reserve water treatment systems pose a high health risk.
- The life expectancy of First Nation citizens is five to seven years less than non-Aboriginal Canadians.
- Infant mortality rates are 1.5 times higher among First Nations.
- Twenty percent of First Nations adults reported cutting the size of their meals or skipping meals because there wasn't enough money for food.
- More than half of First Nations youth who reported fair or poor mental health had never received counseling or mental health services, suggesting a potentially high level of unmet needs.
- First Nations adults who were high school graduates were more mentally balanced and experienced less psychological distress than those who did not graduate.

4. Cultural Connection

- First Nations adults saw family values as the core of community life, followed by Elders and traditional ceremonial activities such as powwows.

- First Nations adults who participated in traditional activities such as hunting and trapping, fishing, hiking, canoeing or kayaking, snowshoeing, or berry picking or other food gathering were more likely to report physical or spiritual balance than were those who did not.

- Almost ninety percent of First Nations youth felt that traditional cultural events were “very important” or “somewhat important” in their life.
- First Nations youth who participated in cultural or extracurricular activities on a regular basis demonstrated increased levels of personal resource variables, such as self-esteem, social support, and mastery, and reported feeling balanced more often than First Nations youth who did not participate in such activities.
- Nearly half of all First Nations youth identified traditional ceremonial activities as a community strength.
- A third of youth identify schoolteachers as significant players in cultural transmission.
- In each of the four facets of well being—physical, emotional, mental and spiritual—about three-quarters of First Nations adults reported feeling balanced “most” or “all of the time.”
- Two-thirds of First Nations adults reported that they participated in community cultural events at least “sometimes.”
- More than half of First Nations youth reported learning culture from their grandparents.

5. Family

- First Nations children, on average, receive twenty-two percent less funding for child welfare services than other Canadian children.Over half of all First Nations youth identified family values as a community strength.
- Over half of all First Nations youth identified family values as a community strength.
- Almost half of First Nations youth live with both of their biological parents; almost half live with their biological mother but not their biological father.
- In 2006, the average household income for First Nations living on-reserve was $15,958, compared to $36,000 (before taxes) for non-Aboriginal Canadians.

- One in four children in First Nations communities live in poverty. That's almost double the national average.
- Almost half of First Nations children live in a household with an annual household income of less than $20,000.
- Sixteen percent of First Nations adults struggle financially on a monthly or more basis to pay for food and transportation.
- Suicide rates among First Nation youth are five to seven times higher than young non- Aboriginal Canadians.

- There are almost 600 unresolved cases of missing and murdered Aboriginal women in Canada.
- First Nations adults with greater ability in their First Nations language had contemplated and attempted suicide less often than those with less ability in their First Nations language.
- Self-esteem, self-mastery, and social support were generally high among First Nations youth and were associated with a range of positive outcomes in various aspects of wellness.

6. Employment

- First Nations people living on-reserve have the lowest labour force participation rate (52%) of any Aboriginal group, compared to 67% for non-Aboriginal Canadians.
- In 2006, the unemployment rate for First Nation people living on-reserve was twenty-five percent—approximately three times the rate for non-Aboriginal Canadians.
- Canada will face a labour shortage by 2017 as baby-boomers retire and there are fewer workers to replace them.
- With more than half of the First Nation population under the age of 23, First Nations youth can fill this gap.

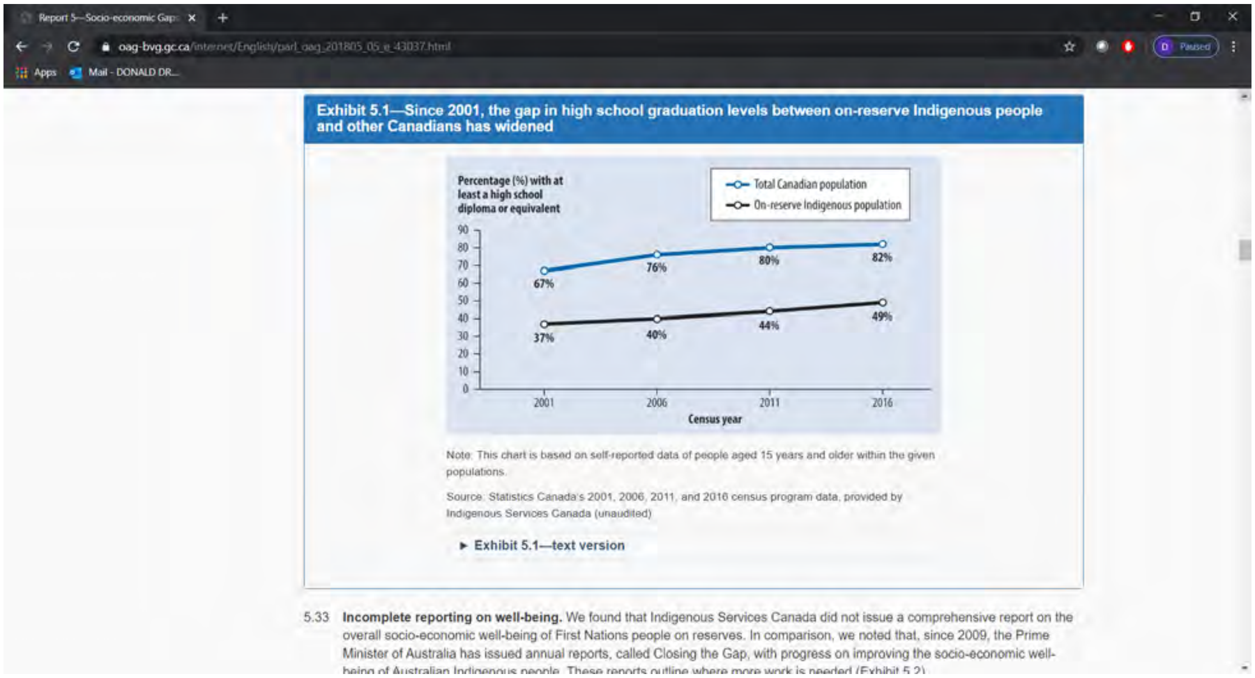
7. Language

- Severe funding shortages create barriers for community members to teach, learn, use, and maintain their languages.

- The proportion of First Nations adults who reported that First Nations language is the language they use most in daily life increased from 2002 to 2010.
- More than two-thirds of First Nations adults reported being able to understand or speak a First Nations language.
- More than one-third of First Nations adults used a First Nations language daily.
- The proportion of adults who understand and speak a First Nations language increases with age.
- More than one-fifth of First Nations youth used a First Nations language in their daily life, and the majority understood or spoke a First Nations language.
- More than three-quarters of First Nations youth felt that it was either “very important” or “somewhat important” to learn a First Nations language.

- A majority of youth aged 12 to 17 years old indicated that it was very important or somewhat important to learn a First Nations language and that grandparents and parents helped them the most to understand their culture.
- Almost half of all First Nations children were reported to be able to speak or understand a First Nations language.
- Having First Nations children learn a First Nations language and participate in cultural activities are highly valued by primary caregivers.
- Family members were the primary transmitter of culture for First Nations children, supported by community members like Elders, friends, and teachers.

Residence by Indigenous geography (10)[2]	Total - Residence on or off reserve[7]								
Age (9)[3]	Total - Age								
Gender (3)[4, 5]	Total - Gender								
Statistics (3)	Count								
Indigenous identity (9)[8]	Total - Indigenous identity[9]	Indigenous identity[10]	Single Indigenous responses[11]	First Nations (North American Indian)	Métis	Inuk (Inuit)	Multiple Indigenous responses[12]	Indigenous responses not included elsewhere[13]	Non-Indigenous identity
Income statistics (17)									
Total - Income statistics[14, 15, 16, 17, 18, 19]	30,335,915	1,348,040	1,299,250	764,755	486,620	47,870	20,215	28,580	28,987,880
With total income	29,242,930	1,270,440	1,223,900	712,850	465,390	45,655	19,035	27,510	27,972,490
Percentage with total income (%)	96.4	94.2	94.2	93.2	95.6	95.4	94.2	96.3	96.5
Median total income ($)	41,200	34,800	34,800	32,400	39,200	33,200	34,800	36,000	41,200
Average total income ($)	54,450	44,920	44,880	41,880	49,400	45,640	44,440	46,920	54,900
With after-tax									



• The closure of the education gap is associated with an increase in GDP of about $30 billion in 2041 compared to the baseline scenario and about 105,000 additional jobs. Furthermore, over the 2021- 2041 period, the gradual closure of the education gap is associated with a cumulative $285 billion in additional GDP and a gain of about 1.03 million job-years (additional yearly employment incomes for First Nations people) compared to the baseline scenario. These gains manifest in a 0.05 percentage point boost to the annual GDP growth rate over the period, raising the figure from 1.71% to 1.76% per year. Similarly, the annual growth rate of Canadian employment is augmented from 0.95% per year to 0.97% per year, and the annual growth rate of labour productivity from 0.75% per year to 0.78% per year.

https://www.csls.ca/AFN-Closing-the-Gap_Report-2023_EN.pdf

Prior to some recent funding increases, First Nations schools were on average 30 per cent under-funded relative to comparable non-aboriginal schools.

A major factor was the maintenance for many years of the 2 per cent annual funding increase implemented in the 1995-96 Program Review. With rapid population growth in First Nations schools and inflation, this led to large, cumulative real per student funding declines.

With high birth rate and young median age (median age Aboriginal population 29.1; non-Aboriginal population 41.3), Canada's economic future will be more heavily weighted to what happens to the Aboriginal population than suggested by total population figures.

http://www.csls.ca/reports/PROct22017.pdf

Even if participation rate gaps remain where they are, Indigenous people, who were 4.6 per cent of the labour force in 2021, will be responsible for 10 per cent of total labour force growth. In many provinces and regions, the proportion is much higher: 17 and 27 per cent in Manitoba and Saskatchewan; 22 per cent in Quebec; 20 per cent in the Atlantic; and in the North, Indigenous people will account for all of the labour force growth, more than offsetting the decline in the non-Indigenous labour force. If the participation rate gap were to close, these proportions would rise significantly. Indigenous people would account for 15 per cent of total labour force growth in Canada as a whole; 41 and 29 per cent in Manitoba and Saskatchewan; 28 per cent in Quebec; and 30 per cent in the Atlantic. Nationally, closing the gap would offset 0.5 percentage points—or around a tenth— of the projected decline in labour force participation rates by 2041.

https://www.csls.ca/reports/IndigenousLabourForceContribution.pdf

Special Issue #1. Establishing a New Fiscal Relationship

https://www.sac-isc.gc.ca/eng/1499805218096/1521125536314

- Greater predictability
- Less cumbersome reporting
- More supportive of First Nations autonomy
- creating 10-year grants
- replacing the Default Prevention and Management Policy
- developing a mutual accountability framework
- establishing an advisory committee on fiscal relations

Special Issue #2. Revitalization of First Nations Languages

1. The 2018 Cost Estimates

The cost estimates in 2018 and based on 2018 as the base year, are as follows.

Costs Adjusted for Population and Inflation

($Millions)

	Total	Education	Non-Education
Year 1	200	110	90
Year 2	416	229	187
Year 3	541	303	238
Year 4	619	349	270
Year 5	737	419	318
Year 6	790	450	340
Year 7	721	420	301
Year 8	776	452	323
Year 9	834	487	347
Year 10	897	524	373

The focus of the costing was on the total. The split between education (pre-school, K-12) and non-education (adult learning, community activities et cetera) is premised on a 60/40 split in favour of education for programming and 50/50 for start-up costs (such as language documentation, training of language educators et cetera).

MPA 887

Summer 2024

Regulation, Private Delivery of Public Services, Program Evaluation, Benefit/Cost Analysis

1. **Regulation**

3. **Regulation** is a key policy instrument used by government to enable economic activity and to protect the health, safety, security, and environment of Canadians.

4. **Regulations are a form of law**—they have binding legal effect and usually set out rules that apply generally, rather than to specific persons or situations. Often referred to as "delegated," "secondary," or "subordinate legislation," **regulations are made by persons to whom or bodies to which Parliament has delegated authority**, such as Cabinet (the Governor in Council), a minister, or an administrative agency. Authority to make regulations must be expressly delegated through enabling legislation.

5. Regulation is a necessary foundation of market economies. A robust and effective regulatory system provides consistency, fairness, and transparency, and supports innovation, productivity, and competition.

6. An effective regulatory system is not just for protective purposes. Regulation often is an enabler. For example, in the economic sphere, it establishes the rules for fair markets, reduces barriers to trade through alignment with trading partners, clarifies conditions for the use of new products, services, and technologies, and fosters new investment.

https://www.canada.ca/en/treasury-board-secretariat/services/federal-regulatory-management/guidelines-tools/cabinet-directive-regulatory-management.html

. The Life Cycle Approach to Regulating

11. The Cabinet Directive on Regulatory Management confirms a "life cycle" approach to regulation making. The life cycle approach recognizes that attention must be given not only to regulatory development and analysis but also to the implementation, evaluation, and review of regulations. As a result, the life cycle approach improves the effectiveness, efficiency, and accountability of the regulatory system to support the government's commitment to Canadians.

6. Regulatory Impact Analysis

12. In consultation with the Regulatory Affairs Sector of the Treasury Board Secretariat, departments and agencies will assess the impact of regulatory proposals at an early stage to determine where approval processes can be streamlined and where resources should be focused. The following factors will be considered in this assessment:

i. Potential impact of the regulation on health and safety, security, the environment, and the social and economic well-being of Canadians;
ii. Cost or savings to government, business, or Canadians, and the potential impact on the Canadian economy and its international competitiveness;
iii. Potential impact on other federal departments or agencies, on other governments in Canada, and on Canada's foreign affairs;
iv. Degree of interest, contention, and support among affected parties and among Canadians; and
v. Overall expected impact: Recognizing that regulatory impact analysis can be resource intensive, the Directive emphasizes the principle of proportionality—analysis should be focused where it is most needed. Therefore, at the earliest stages of regulatory design, departments and agencies must assess the regulatory

proposal, in consultation with the Regulatory Affairs Sector of the Treasury Board Secretariat, to determine its overall expected impact (i.e., low, medium or high) and the particular analytical and other requirements to be met.

13. **Emergency situations:** When there is an immediate and serious risk to the health and safety of Canadians, their security, the environment, or the economy, an expedited process may be required. In these cases, departments and agencies will work with the Regulatory Affairs Sector of the Treasury Board Secretariat to proceed in a manner that most effectively protects the public interest.

14. **Regulatory Impact Analysis Statement (RIAS):** A statement summarizing the analysis undertaken to design a regulatory proposal under this Directive is to be published in the Canada Gazette in accordance with appropriate guidance from the Regulatory Affairs Sector of the Treasury Board Secretariat.

(G) Analyzing the benefits and costs of regulation

33. When determining whether and how to regulate, departments and agencies are responsible for assessing the benefits and costs of regulatory and non regulatory measures, including government inaction.

34. This analysis should include quantitative measures and, when it is not possible to quantify benefits and costs, qualitative measures.

35. When assessing options to maximize net benefits, departments and agencies are to:

i. Identify and assess the potential positive and negative economic, environmental, and social impacts on Canadians, business (including small business), and government of the proposed regulation and its feasible alternatives; and
ii. Identify how the positive and negative impacts may be distributed across various affected parties, sectors of the economy, and regions of Canada.

36. Detailed requirements for complying with this Directive with respect to analyzing the benefits and costs of regulation, including certain analytical parameters and reporting standards, are set out in guidance from the Regulatory Affairs Sector of the Treasury Board Secretariat. This guidance includes the Triage Statement, the Regulatory Impact Analysis Statement Template and the Canadian Cost-Benefit Analysis Guide for Regulatory Proposals.

The Triage Statement is an initial assessment to determine the potential levels of impact of a regulatory proposal.

Evaluating regulatory programs

45. Departments and agencies are to evaluate their regulatory programs according to the requirements established by Treasury Board to demonstrate results for Canadians.

Reviewing regulatory frameworks

46. Departments and agencies are to regularly assess the results of performance measurement and evaluation to identify regulatory frameworks in need of review. Once identified, departments and agencies are to examine the regulation with a focus on:

i. The effectiveness of the current regulation in meeting the policy objective;
ii. The current instrument selection, level of intervention, and degree of prescriptiveness;
iii. The clarity and accessibility of the regulation to users; and
iv. The overall impact on competitiveness, including trade, investment, and innovation.

47. Planning, setting of priorities and timelines, and the measuring and reporting of outcomes of regulatory review should be determined by departments and agencies in collaboration with affected parties.

7. Regulatory Management

(M) "One-for-One" Rule

48. Departments and agencies are responsible for meeting the requirements of the One-for-One legislation.

(N) Small business lens

51. Departments and agencies are responsible for applying a "small business lens" when designing regulations and for being sensitive and responsive to the burden that regulations place on small business. More specifically, as stated in Section 6 (D) 26 (iv), (G) 35 (i), (H) 37 (ii) and (iii) of this Directive, departments and agencies are to:

i. Engage small businesses in alternative approaches to compliance, including costs, when selecting the appropriate mix of government instruments;
ii. When assessing options to maximize net benefits, identify and assess the potential positive and negative impacts on small businesses;
iii. Demonstrate that the recommended option minimizes the regulatory burden on small businesses without compromising risk protection; and
iv. Provide a justification for the recommended option when other less burdensome options exist for small businesses.

(O) Forward regulatory planning

52. Departments and agencies are responsible for providing advance public notice of regulatory proposals coming forward. This will contribute to a predictable regulatory environment for business, Canadians, and key trading partners. Each year, departments and agencies are to publish on their websites forward regulatory plans that, at a minimum, do the following:

i. Identify and describe expected regulatory changes;

ii. Provide information on planned consultations; and
iii. Provide departmental contacts for further information.

(P) Service performance

53. Departments and agencies are responsible for maintaining high levels of professionalism in their interactions with affected Canadians, including businesses, and for providing them with clear and timely decisions.

54. Departments and agencies will therefore develop and publish services standards that, at a minimum, address the timeliness of decision making. They will also report publicly on performance against those standards, particularly for regulatory authorizations (e.g., licensing, permits, certifications).

55. Departments and agencies will also clarify information requirements and the process to be followed, including the process for complaints about poor service.

(Q) Reporting

56. The Treasury Board Secretariat will periodically prepare public reports on progress on the government's regulatory priorities.

(R) Review of the Directive

57. The Directive will be reviewed within five years of its coming into force:

i. The Regulatory Affairs Sector of the Treasury Board Secretariat will work with departments and agencies to monitor the implementation of the Directive.
ii. Departments and agencies are expected to submit a report to the Regulatory Affairs Sector annually on how they have met the commitments and directions set out in the Directive.
iii. It is expected that the review of the Directive will include the involvement of interested Canadians.

https://www.canada.ca/en/privy-council/services/publications/guide-making-federal-acts-regulations.html#pt3

Summary of the Regulatory Process

Most regulations and some other documents have to meet the requirements of a series of steps known as the regulatory process. This process is a combination of requirements that flow from the legal and policy frameworks. It includes the following steps:

- development of a regulatory proposal by a department responsible for an enabling Act or an administrative agency or other body that has regulation-making authority (sponsoring department or agency),
- central agency review (by Privy Council Office, Treasury Board Secretariat, Department of Justice);
- pre-publication;
- making or approval;
- registration;
- coming into force;
- publication;
- distribution;
- parliamentary scrutiny.

An example of a regulation publication in the Canada Gazette Part II

http://www.gazette.gc.ca/rp-pr/p2/2020/2020-03-04/html/sor-dors25-eng.html

Critical Habitat of the Paxton Lake Benthic Threespine Stickleback (Gasterosteus aculeatus) Order: SOR/2020-25

Canada Gazette, Part II, Volume 154, Number 5

Registration

SOR/2020-25 February 17, 2020

SPECIES AT RISK ACT

Whereas the Paxton Lake Benthic Threespine Stickleback (*Gasterosteus aculeatus*) is a wildlife species that is listed as an endangered species in Part 2 of Schedule 1 to the *Species at Risk Act* [footnotea];
Whereas the recovery strategy that identified the critical habitat of that species has been included in the Species at Risk Public Registry;

Whereas no portion of the critical habitat of that species that is specified in the annexed Order is in a place referred to in subsection 58(2) [footnoteb] of that Act;
And whereas the Minister of Fisheries and Oceans is of the opinion that the annexed Order would affect an area in respect of which a wildlife management board is authorized by a land claims agreement to perform functions in respect of wildlife species and, pursuant to subsection 58(8) of that Act, has consulted the wildlife management board in question with respect to the Order;

Therefore, the Minister of Fisheries and Oceans, pursuant to subsections 58(4) and (5) of the *Species at Risk Act* [footnotea], makes the annexed *Critical Habitat of the Paxton Lake Benthic Threespine Stickleback (Gasterosteus aculeatus) Order*.
Ottawa, February 13, 2020

Bernadette Jordan
Minister of Fisheries and Oceans

Critical Habitat of the Paxton Lake Benthic Threespine Stickleback (Gasterosteus aculeatus) Order

Application

1 Subsection 58(1) of the *Species at Risk Act* applies to the critical habitat of the Paxton Lake Benthic Threespine Stickleback (*Gasterosteus aculeatus*), which is identified in the recovery strategy for that species that is included in the Species at Risk Public Registry.

Coming into force

2 This Order comes into force on the day on which it is registered.

REGULATORY IMPACT ANALYSIS STATEMENT

(*This statement is not part of the orders*.)

Issues

The Paxton Lake Benthic Threespine Stickleback, Paxton Lake Limnetic Threespine Stickleback, Vananda Creek Benthic Threespine Stickleback, and Vananda Creek Limnetic Threespine Stickleback (*Gasterosteus aculeatus*; hereafter referred to as the Paxton Lake and Vananda Creek Stickleback Species Pairs) are four species of small freshwater fish found only within the Paxton Lake and Vananda Creek watersheds on Texada Island in southwestern British Columbia.

In June 2003, the Paxton Lake and Vananda Creek Stickleback Species Pairs were listed as "endangered species" [footnote1] under the *Species at Risk Act* [footnote2] (SARA). The critical habitat [footnote3] of these species was identified in the final amended *Recovery Strategy for Paxton Lake, Enos Lake,4 and Vananda Creek Stickleback Species Pairs (Gasterosteus aculeatus) in Canada* (the amended Recovery Strategy), which was posted in the Species at Risk Public Registry (the Public Registry) on August 21, 2019. [footnote4]
As competent minister under SARA, the Minister of Fisheries and Oceans (the Minister) is required to ensure that the critical habitat of the endangered Paxton Lake and Vananda Creek Stickleback Species Pairs is legally protected by provisions in, or measures under, SARA or any other Act of Parliament, including agreements under section 11, or by the application of subsection 58(1) of SARA.

Background

The Government of Canada is committed to conserving biodiversity both nationally and internationally. Canada, with support from provincial and territorial governments, signed and ratified the United Nations' Convention on Biological Diversity in 1992. As a party to this Convention, Canada developed the Canadian Biodiversity Strategy and federal legislation to protect species at risk. SARA received royal assent in 2002 and was enacted to prevent wildlife species from being extirpated or becoming extinct; provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity; and manage species of special concern to prevent them from becoming endangered or threatened.

Habitat protection under SARA

When a wildlife species is listed as endangered, threatened or extirpated in Schedule 1 of SARA, a recovery strategy, followed by one or more action plans, must be prepared by the competent minister(s) and included in the Public Registry. The recovery strategy or action plan must include, to the extent possible, an identification of the species' critical habitat (i.e. the habitat necessary for a listed wildlife species' recovery or survival) based on the best available information.

Under SARA, critical habitat must be legally protected within 180 days after the posting in the Public Registry of the final recovery strategy or action plan that identifies that critical habitat. That is, critical habitat that is not in a place referred to in subsection 58(2) of SARA [footnote5] must be protected either by the application of the prohibition in subsection 58(1) of SARA against the destruction of any part of the species' critical habitat, or by provisions in, or measures under, SARA or any other Act of Parliament, including agreements under section 11 of SARA.

Paxton Lake and Vananda Creek Stickleback Species Pairs

The Paxton Lake and Vananda Creek Stickleback Species Pairs each consist of a "limnetic" [footnote6] species adapted for a zooplankton-consuming lifestyle in the pelagic zone (in the water column), and a bottom-feeding "benthic" [footnote7] species adapted to prey on benthic invertebrates in the littoral zone (nearshore). The limnetic and benthic species overlap in range but do not usually interbreed and are morphologically and genetically distinct. The Paxton Lake Stickleback Species Pair is restricted to a single lake (Paxton Lake) on Texada Island, while the Vananda Creek Stickleback Species Pair is found in Spectacle, Priest and Emily lakes, and their interconnecting marshes and streams in the Vananda Creek watershed, on Texada Island. The endangered status of these Stickleback species pairs is largely a reflection of their limited geographic range and natural rarity; expert opinion suggests current population sizes are believed to approximate historical sizes.
In May 2000, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed the status of the Paxton Lake and Vananda Creek Stickleback Species Pairs and classified both species pairs as endangered. COSEWIC reassessed the species pairs in April 2010 and confirmed their classification as endangered.

In June 2003, the Paxton Lake Benthic Threespine Stickleback, Paxton Lake Limnetic Threespine Stickleback, Vananda Creek Benthic Threespine Stickleback, and Vananda Creek Limnetic Threespine Stickleback were listed as endangered species on the List of Wildlife Species at Risk (Schedule 1) of SARA.

As the Paxton Lake and Vananda Creek Stickleback Species Pairs are listed as endangered species in Schedule 1 of SARA, the prohibitions stated in sections 32 and 33 of SARA automatically apply to them:

- prohibition against killing, harming, harassing, capturing or taking an individual of such species;
- prohibition against possessing, collecting, buying, selling, or trading an individual of such species, or any part or derivative of such an individual; and
- prohibition against damaging or destroying the residence of one or more individuals of such species.

In August 2019, the final amended *Recovery Strategy for Paxton Lake, Enos Lake, and Vananda Creek Stickleback Species Pairs (*Gasterosteus aculeatus*) in Canada* was posted in the Public Registry. This amended Recovery Strategy identifies the critical habitat necessary to support the recovery of the Paxton Lake and Vananda Creek Stickleback Species Pairs.

Objective

The objective of the critical habitat orders for the Paxton Lake and Vananda Creek Stickleback Species Pairs (the orders) is to trigger the prohibition in subsection 58(1) of SARA against the destruction of any part of the critical habitat of those species that is identified in the amended Recovery Strategy for these species.

Description

Critical habitat for the Paxton Lake and Vananda Creek Stickleback Species Pairs has been identified as the entirety of Paxton, Spectacle, Priest and Emily lakes (each with a 15 m riparian [footnote8] width surrounding their wetted perimeters), as well as the stream and marsh between Emily and Priest lakes, and the shallow marsh between Spectacle and Priest lakes (each with a 30 m riparian width surrounding their wetted perimeters). The orders trigger the application of the prohibition set out in subsection 58(1) of SARA against the destruction of any part of the species' critical habitat, including the biophysical features and attributes identified in the amended Recovery Strategy, and results in the critical habitat of the Paxton Lake and Vananda Creek Stickleback Species Pairs being legally protected.

If new information becomes available to support changing the critical habitat of the Paxton Lake and Vananda Creek Stickleback Species Pairs, the amended Recovery Strategy will be updated as appropriate (taking into account feedback from public consultation) and these orders will apply to the revised critical habitat once included in a final further amended recovery strategy published in the Public Registry.

The orders afford the Minister of Fisheries and Oceans an additional tool to ensure that the critical habitat of the Paxton Lake and Vananda Creek Stickleback Species Pairs is legally protected against destruction. They enhance the protections already afforded to the species' habitat under existing legislation, in particular subsection 35(1) of the *Fisheries Act*, which prohibits the harmful alteration, disruption or destruction of fish habitat.

Regulatory development

Consultation

Critical habitat for the Paxton Lake and Vananda Creek Stickleback Species Pairs was initially identified in the draft (2014) and proposed (2016) versions of the *Action Plan for the Paxton Lake and Vananda Creek Stickleback Species Pairs (*Gasterosteus aculeatus*) in Canada* (the Action Plan), and was subsequently moved to the amended Recovery Strategy. Therefore, early consultations on critical habitat identification and legal protection took place during the draft and proposed action plan development phase.

The draft Action Plan was consulted upon regionally from August 19 to September 17, 2014. This document included the critical habitat for the Paxton Lake and Vananda Creek Stickleback Species Pairs and indicated that legal protection of the critical habitat was anticipated and would be accomplished through a SARA critical habitat order made under subsections 58(4) and (5), which would trigger the prohibition in subsection 58(1) of SARA against the destruction of any part of the critical habitat. Input on the draft Action Plan was solicited online via Fisheries and Oceans Canada's Pacific Region consultations web page, and email notifications were sent to 57 stakeholders, including industry, academia, non-governmental organizations, and government representatives (provincial and federal). Direct mail-outs, faxes and emails were sent to two Indigenous organizations whose claimed traditional territories overlap with the Paxton Lake and Vananda Creek watersheds, and letters were sent to 352 private landowners notifying them of the consultation. The general public was notified via social media and newspaper advertisements. Comments were received from seven respondents; no comments were received from Indigenous groups or Indigenous group organizations. Primary topics discussed included existing protection mechanisms, additional threats, critical habitat identification (scientific rationale) and protection (implications for landowners and natural resource management), additional activities likely to destroy critical habitat, socio-economic costs, and the importance of stewardship. All feedback received during the consultation period was considered in creating the 2016 proposed Action Plan, which was posted in the Species at Risk Public Registry for a public comment period between September 9 and November 8, 2016. No comments were received during the public comment period and no opposition was received regarding the proposed critical habitat identified or the proposed use of SARA critical habitat orders.

Subsequent to the publication of the 2016 proposed Action Plan, the identification of critical habitat was removed from the Action Plan and added to the draft amended Recovery Strategy, which then underwent a 30-day targeted external review from May 4 to June 3, 2017. The draft amended Recovery Strategy was emailed to 31 stakeholders, including industry, academia, non-governmental organizations, and government representatives (provincial and federal). One set of comments from academia was received and no opposition was received regarding the proposed critical habitat identified or the proposed use of SARA critical habitat orders. The proposed amended Recovery Strategy was posted in the Species at Risk Public Registry for a 60-day public comment period from October 17 to December 16, 2018. No comments were received during the public comment period, and no opposition was received regarding the proposed critical habitat identified or the proposed use of SARA critical habitat orders. The final amended Recovery Strategy was posted in the Species at Risk Public Registry on August 21, 2019.

Under subsection 58(8) of SARA, consultation with a wildlife management board was required, as there are areas in respect of which a wildlife management board is authorized by a land claims agreement (the Tla'amin Final Agreement) to perform functions with regard to wildlife species that will be affected by the orders. As part of the targeted external review of the draft amended Recovery Strategy, the document was emailed on May 4, 2017, to the Tla'amin wildlife management board and six Indigenous groups along with a letter that outlined the external review process and offered additional meetings with Fisheries and Oceans Canada. Emails providing advanced notification of the proposed amended Recovery Strategy comment period were sent to the pertinent wildlife management board on October 9, 2018. No comments were received from the wildlife management board or Indigenous organizations during the targeted external review of the draft amended Recovery Strategy, or the subsequent public comment period for the proposed amended Recovery Strategy.

Fisheries and Oceans Canada has engaged with the Province of British Columbia about the nature and implications of critical habitat orders. The Province has indicated support provided an evaluation of socio-economic implications and consultation with directly affected parties are conducted prior to the making of a critical habitat order. Consultation with the affected parties was completed during the development of the amended Recovery Strategy, as described above, and the socio-economic impacts were determined to be low by Fisheries and Oceans Canada.

Overall, no significant concerns were raised during the consultation period with respect to the critical habitat identified for the Paxton Lake and Vananda Creek Stickleback Species Pairs or to plans to protect the critical habitat through the making of critical habitat orders.

Modern treaty obligations and Indigenous engagement and consultation

The critical habitat of the Paxton Lake and Vananda Creek Stickleback Species Pairs does not occur on reserves or any other lands that are set apart for the use and benefit of a band under the *Indian Act*.

An assessment of modern treaty implications was completed. The assessment concluded that implementation of this proposal will likely not have an impact on the rights, interests and/or self-government provisions of treaty partners.

There are areas in respect of which a wildlife management board is authorized by a land claims agreement (the Tla'amin Final Agreement) to perform functions with regard to wildlife species that will be affected by the orders. The pertinent wildlife management board was consulted, as required under SARA subsection 58(8).

Refer to the "Consultation" section above for information on the Indigenous engagement completed.

Instrument choice

Under SARA, all of a species' critical habitat must be protected either by the application of the prohibition against the destruction of any part of the critical habitat in subsection 58(1), or by provisions in, or measures under, SARA or any other Act of Parliament, including agreements under section 11. Courts have concluded that other federal laws must provide an equal level of legal protection for critical habitat as would be engaged through subsections 58(1) and (4), failing which, the Minister must make a critical habitat order, thereby triggering the application of subsection 58(1) of SARA. They have also concluded that subsection 35(1) of the *Fisheries Act* does not legally protect critical habitat, as subsection 35(2) grants the Minister complete discretion to authorize the destruction of fish habitat. As a result, in most cases, the making by the Minister of an order to legally protect critical habitat may be necessary.

Regulatory analysis

Benefits and costs

Considering the existing federal regulatory mechanisms in place, the incremental costs and benefits resulting from the making of the orders are anticipated to be negligible. No incremental costs to Canadian businesses and Canadians are anticipated. However, the federal government may incur some negligible costs as it may undertake some additional activities associated with compliance promotion and enforcement, the costs of which would be absorbed through existing funding allocations.

The compliance promotion and enforcement activities to be undertaken by Fisheries and Oceans Canada, in combination with the continuing outreach activities undertaken as part of the critical habitat identification process, may also contribute to behavioural changes on the part of Canadian businesses and Canadians (including Indigenous groups) that could result in incremental benefits to the species, their habitat or the ecosystem. However, these incremental benefits cannot be assessed qualitatively or quantitatively at this time due to the absence of information on the nature and scope of the behavioural changes as a result of these outreach activities.

Small business lens

The small business lens was applied and it was determined that the orders do not impose any regulatory costs on small businesses.

One-for-one rule

The one-for-one rule does not apply to the orders, as there are no anticipated additional administrative costs imposed on businesses. The orders will be implemented under existing processes.

Regulatory cooperation and alignment

SARA is a key tool for the conservation and protection of Canada’s biological diversity and fulfills a commitment made under the United Nations’ Convention on Biological Diversity. Therefore, the orders will respect this international agreement in furthering the protection of significant habitats in Canada to conserve wildlife species at risk.

Strategic environmental assessment

In accordance with the *Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals*, a preliminary scan to identify the potential for important environmental effects was conducted. It was concluded that a strategic environmental assessment was not required for the orders because they are not expected to have an important environmental effect on their own considering the existing federal regulatory mechanisms in place.

However, it is expected that when all planned recovery activities and legal protections are considered together, these will have a positive environmental impact and contribute to the achievement of the Federal Sustainable Development Strategy goal of healthy wildlife populations.

Gender-based analysis plus

A preliminary consideration of gender-based analysis plus (GBA+) factors did not reveal potential differences in impact on groups or subgroups of individuals.

Implementation, compliance and enforcement, and service standards

Implementation

Threats to critical habitat are managed and will continue to be managed through existing measures under federal legislation.

In cases where it is not possible to avoid the destruction of a part of the critical habitat of the Paxton Lake and Vananda Creek Stickleback Species Pairs, the proponents of the works, undertakings or activities may apply to the Minister of Fisheries and Oceans for a permit under section 73 of SARA, or an authorization under section 34.4 or 35 of the *Fisheries Act* that is compliant with section 74 of SARA.

Under section 73 of SARA, the Minister may enter into an agreement with a person, or issue a permit to a person, authorizing the person to engage in an activity affecting a listed aquatic species, any part of its critical habitat, or the residences of its individuals, provided, among other things, the Minister forms the opinion that the activity is for a purpose set out in subsection 73(2) of SARA, and the pre-conditions set out in subsection 73(3) of SARA are met.

Fisheries and Oceans Canada also provides a single window for proponents to apply for an authorization under paragraph 34.4(2)(b) or 35(2)(b) of the *Fisheries Act* that will have the same effect as a permit issued under subsection 73(1) of SARA, as provided for by section 74 of SARA. In considering applications for authorizations under the *Fisheries Act* that would, if approved, have the same effect as a permit under section 73 of SARA, the Minister is required to form the opinion that the activity is for a purpose set out in subsection 73(2) of SARA. Furthermore, among other things, the pre-conditions set out in subsection 73(3) of SARA must also be met.

A SARA permit or *Fisheries Act* authorization, if approved, would contain the terms and conditions considered necessary for protecting the species, minimizing the impact of the authorized activity on the species or providing for its recovery.

Compliance and enforcement

Under the penalty provisions of SARA, when found guilty of an offence punishable on summary conviction, a corporation other than a non-profit corporation is liable to a fine of not more than $300,000, a non-profit corporation is liable to a fine of not more than $50,000, and any other person is liable to a fine of not more than $50,000 or to imprisonment for a term of not more than one year, or to both. When found guilty of an indictable offence, a corporation other than a non-profit corporation is liable to a fine of not more than $1,000,000, a non-profit corporation is liable to a fine of not more than $250,000, and any other person is liable to a fine of not more than $250,000 or to imprisonment for a term of not more than five years, or to both.

Any person planning on undertaking an activity within the critical habitat of the Paxton Lake and Vananda Creek Stickleback Species Pairs should inform themself as to whether that activity might contravene one or more of the prohibitions under SARA and, if so, should contact Fisheries and Oceans Canada.

2. Private delivery of public services

Private sector involvement in public services has historically been controversial. A central concern has been introducing the profit motive in public services. Another concern is that private operators will use non-union employees and pay lower wages and benefits.

Yet despite controversy, private delivery has always been prevalent.

Consider, for example, that much of healthcare is public pay to private service providers (doctors).

In recent years there seems to be more acceptance of private sector involvement. And that involvement has increased.

Still, there seems to be controversy. People seem to be prepared to use private services for health, diagnostics for example, as long as they can pay with their health card. Fewer seem prepared to pay privately.

History of private sector in public services

After 1945 governments took on the role of near-monopoly provider of utilities such as power and water, or services such as healthcare, social welfare, education and of transport infrastructure and serv ices
Increasingly called into question ability to respond to political, social and economic change.
Margaret Thatcher, elected in 1979, launched an unprecedented wave of privatization, contracting out and restructuring
Contracting in the U.S. also grew in late 1970s with one catalyst being Proposition 13 in 1978
By 1980s contracting out had begun to grow rapidly in many countries
It reflected a belief that "government monopolies are by nature bloated, inefficient and undermined by the absence of competition"
A distinction was being drawn between a steering role (policy and oversight) and rowing (actual delivery of services) and more rigour was attempted in measuring what government does and the results it gets for money devoted.

Private involvement could be:

Privatisation

In Canada there have been **large-scale privatizations** including Air Canada in 1988, Petro-Canada in 1991 and Canadian National Railways in 1995.

Partnership

Outsourcing

Hybrids such as Special Operating Agencies

A hope with private services is that it will bring more competition and better, lower cost services.

To address the controversy, one might want to do an empirical test of cost and quality.

To do this one would need to compare "whole-life costs" of projects. And an obstacle to doing that is that this is often not calculated in the public sector. And even where/when it is, there are often embedded costs (central agencies, for example) that are not included.

Private projects are not all alike. It very much depends upon how the arrangements are set. For example, rewards for quality improvement may deliver quality improvements. Fixed price contracts may deliver poor quality.

Claims that private sector projects, such as infrastructure, cost more than public sector projects often revolves around financing costs. Private operators typically face higher interest rates than public agencies (private operators perceived to have higher risk).

Yet that may not be the whole story. The private operator may indeed be taking on more risk. Risk that if left in public hands could cost taxpayers more down the road.

Financing cost disadvantages to the private sector could be offset by greater private sector efficiency. Again the "devil is in the detail" of the contract.

As a general rule, the best candidates tend to be projects where activities are easiest to cost, measure and evaluate (garbage collection for example).

https://www.conferenceboard.ca/temp/e300f950-1981-4b1e-85e7-f68ffd62469a/DispellingTheMythsRpt_WEB.pdf

The Conference Board of Canada has argued that private and public projects have different characteristics:

Public-Private-Partnerships (P3s): integrate two or more project phases; output-based contract specifications, payment upon delivery, private financing and private sector project stewardship.

Conventional Public: separate procurement for each project phase; input-based contract specifications; monthly payments to contractors, public financing, and public sector project stewardship.

P3s started in the UK in 1992.

Most common use is the provision of highway infrastructure.

User fees are often a tool to facilitate P3s. They create a flow of revenue to compensate the private contractor/operator for capital and operating costs.

The Canadian Government has also used **Special Operating Agencies** which are sort of a bridge between public and private entities.

Examples include The Canada Revenue Agency, Canada Post, provincial lottery and gaming agencies,

Special operating agencies

Special operating agencies are units within a department or agency that have some management flexibility, independence and separate accountability. They function within a framework agreement approved by the departmental deputy minister, the minister responsible and the Treasury Board, without legislation. These agencies have a clear mandate, provide services that are readily available and identifiable, and form part of the departmental legislative framework. They are considered part of the host department and not separate legal entities.

Another means of involving the private sector is through **vouchers.** Vouchers separate the funding and the delivery of the service. The funding is through public provision of a voucher. The recipient then uses the voucher to services at a range of suppliers. For example, affordable housing can be addressed through vouchers. A household could be given a voucher for $400 per month. The household could then shop around, with the voucher in hand, for the deal that suits them best. Vouchers are also used for primary and secondary education, child care services and the elderly.

Note the charter schools in the United States operate on a voucher system.

Tax credits for documented services can be considered a form of voucher. Tax support for expenses at private day cares in Canada is an example.

An obstacle with **outsourcing** is that the public sector often lacks the skills to design and monitor contracts properly. An example occurred in Ottawa a few years ago. The City had to take over the construction of a bridge from a private company that declared bankruptcy. The City set the fine for being late with the project so low that the new contractor simply let time go by, sending a modest cheque each day.

A U.S. study found the average cost savings from outsourcing to be 33 per cent with same or higher levels of service. 15-20 in Australia. 5-30 in Denmark. 20-25 in Iceland. 20 in the U.K.

Keys to success: contracts outcome driven – the more input-oriented the less scope for innovation; do not rely on single source; focus on activities that are easiest to cost, measure and evaluate, require tight descriptions of expected outcomes and apply rigorous monitoring and evaluation

General Reference: See Chapter 5 of

https://www.oecd.org/governance/modernisinggovernmentthewayforward.htm

https://www.oecd-ilibrary.org/docserver/gov_glance-2011-en.pdf?expires=1586542297&id=id&accname=guest&checksum=5226684B3F3760991F4142D1C8309B0D

3. Program Evaluation

https://evaluationcanada.ca/system/files/cjpe-entries/12-1-047.pdf

Auditor General's Office established in 1870s**.**

1960 – first real attempts to do effectiveness/efficiency evaluations

1976 first mandate to departments to evaluate

1976 TBS Benefit-Cost Analysis Guide (discount rate, NPV)

1977 first TBS policy framework

1978 Office of the Comptroller General created with a program evaluation unit

1979 Lambert Commission (Royal Commission on Financial Management and Accountability) advice on improving program evaluation

By late 70s and 80s growing computer and data capability helped

1981 TBS deemed 12/58 agencies/departments had adequate evaluation

1981 Canadian Evaluation Society created

Common problem with early evaluation (continues): failure to specify program goals and objectives

Nielsen Task Force 1980s

Negative on program evaluations, finding them self serving and reflecting Deputy Ministers' vested interests

1993 David Zussman (U of Ottawa) concluded program evaluations had not led to improvements in programs

Unclear objectives

Unwillingness to address problems

Political interference

Defensiveness

No follow-up

2009 TBS Directive on 5-year Cycle of Program Evaluation

2016 TBS Directive on Results

Deputy Ministers must establish an internal evaluation function

An annual 5-year evaluation plan must be send to TBS

An attempt to switch from an obsession with inputs to evaluating program **results.**

Efficiency and Effectiveness in Public Services

Effectiveness – are you doing the right things and what are you accomplishing

Efficiency **–** are you doing things well in the sense of delivering good results for a reasonable cost

Focus tends to be on the former, although almost always badly. Less often is the focus on the latter.

Why?

- Governments and bureaucrats do not care about inefficiency when the times are good and revenues are flowing in
- They focus on it occasionally when fiscal austerity is in place but they tend more to cut services or starve their funding, thus inflicting long-run damage

Obstacles to Make Efficiency More Central

1. Efficiency does not have a simple framework like profit maximization to organize around
2. Most programs have multiple objectives
3. Complex interactions between programs with unclear cause and effect
4. Can be complex and long lags between a policy and the outcome (result)

5. Difficult to measure public services. But not as difficult as often made out. A whole range of public services can be measures just as in the private sector. How many jobs did you create? How many drivers' licences processed?
6. Many governments do not want to be transparent and accountable.
7. Wrong administrative structure. Look at a private sector bank. CFO and head of HR are near the top. In Government they are typically below the ADM level. Can employees objectively evaluate programs in their own department. Programs that may have been created by their bosses?
8. Wrong incentive systems. Culture. Those who get promoted tend to be associated with new and growing programs. Hard to gain a great reputation by making a program more efficient.
9. PS focuses more on inputs – how much you spend. Rarer to focus on outputs. Even rarer to focus on outcomes. Cannot therefore define effectiveness or efficiency.
10. Typical sequence. New program. Unclear objectives. No establishment of a priori metrics to evaluate success. Rarely evaluated. And when evaluated, focus is on praise rather than critical assessment. And then little done to correct failures and no accountability around that. AG comes in and advocates devoting enormous resources to cover risks at the tail of the risk probability distribution.
11. Even when there is a practice of performance information it is not usually integrated into a jurisdiction's budget practices.

What we need:

1. Clear objectives
2. Measurement
3. Benchmarks for efficiency (private sector and/or international)
4. Integrate into budget making
5. Needs to be drive from the Centre. Strong leadership from head of government and Cabinet and Cabinet Office and Department of Finance and/or TBS.

4. Cost-Benefit Analysis (or Benefit-Cost Analysis)

https://www.tbs-sct.gc.ca/rtrap-parfa/analys/analys-eng.pdf

Benefits

Measurement of benefits A fundamental tool of applied welfare economics is the **willingness to pay (WTP) principle.** The amount (demand price) that an individual is willing to pay for an incremental unit of a good or service measures its economic value to the demander and hence its economic benefit to the economy.

For some benefit-cost analyses it is necessary to apply a value to life. A benefit of cleaner air is fewer deaths. Safer roads deliver fewer deaths. Gun control delivers fewer deaths. What is the value of life? Some argue it is unethical to even venture into the domain. But many benefit-cost analyses apply a value. This includes analyses from governments.

A conventional approach is to sum the foregone earnings of a person from premature death. This implicitly assumes their earnings reflect the value of their life.

But do they? More recently such estimates have been raised to reflect an intrinsic value people attach to life.

Another approach is to quantity how much people either demand or are willing to pay to alter risk of death. How much would people pay to be able to drive faster? How much more money would someone demand to have the risk in their job increased a certain amount? Sometimes such questions are asked through surveys. In a sense they reveal the value someone puts on life. But do they really? Do people rationally consider the prospects of the risk change for their life?

Costs

The costs are simply the costs of the resources used as a consequence of the implementation of the policy. There are generally two types of direct costs: one is the compliance costs incurred by the private sector and the other is the administrative costs incurred by government. There also may be other indirect costs associated with the particular cases.

Discount Rate

The term discount rate refers to the time value of the costs and benefits from the viewpoint of society. It is similar to the concept of the private opportunity cost of capital used to discount a stream of net cash flows of an investment project, but the implications can be more complex.

The discount rate for Canada was re-estimated recently by Jenkins and Kuo (2007). It is found to be a real rate of approximately 8 per cent.35 This rate is lower than the real rate of discount of 10 per cent recommended by the Treasury Board of Canada Secretariat in 1998 but is higher than the 7 per cent real rate proposed by Burgess in 1981 and the 7.3 per cent real rate recommended by Brean et al.36 This rate of 8 per cent is consistent with the 10 per cent estimated earlier and used in the Treasury Board guidelines of 1976 and 1998.37 Over time, the effective rate of corporate income tax in Canada has been steadily decreasing. Furthermore, the introduction of the goods and services tax has removed much of the burden of the sales tax system from the value added of capital. Both these policy changes will tend to lower the required gross of tax rate of return on capital. We recommend that a real rate of 8 per cent be used as the discount rate for the evaluation of regulatory interventions in Canada.

One approach is to estimate the social time preference rate, which is based on the rate at which individuals discount future consumption and projected growth rate in consumption.38 For Canada, the social time preference rate has been estimated to be around 3 per cent.39 In these circumstances, the net present value of the results of the analysis can also be carried out using a social discount rate of 3 per cent accompanied by the use of a shadow price of investment that is applied to all the costs of the intervention that results in a postponement or reduction of investment activity. However, there is still controversy in the literature on the use of these social discount rates and further guidance will be needed in the future. Whatever rate is used, the costs and benefits should be discounted using the same rate.

Examples from infrastructure and regulation

1. Discussed high speed rail.
2. Fixed link Kingston to Wolfe Island
3. Gun control