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ECONOMICS 2218A
Canadian Economic Policy Issues
September - December 2020
Lectures: Monday and Wednesday 11:355-12:55
Online Synchronous

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In past years, this course has begun by examining public policy regarding the funding of post-secondary education and old age pensions. But between February and April of 2020, 5.5 million Canadians (28.5% of the workforce) lost their jobs or all or most of their workhours. The Covid-19 pandemic is a global medical crisis which morphed with incredible speed, severity and worldwide synchronization into a global economic disaster. Future prospects for the economy suddenly became so uncertain that the Bank of Canada, in its April 2020 update, was unwilling even to attempt a forecast. Other agencies, like the IMF (International Monetary Fund) or OECD (Organization for Economic Co-Operation and Development), projected a global contraction "much worse than during the 2008–09 financial crisis", which itself was the most severe global recession since Great Depression of the 1930s. Although some jobs did come back in May and June, unemployment in July and August remained extremely high. In 2020, very clearly, the economic policy issue now at the top of the Canadian agenda is the impact of Covid-19 and the appropriate public policy response to it.

The topics of post-secondary education and old age pension funding were chosen as issues to examine because (1) they are of direct personal concern to each student; (2) every country faces these issues, but the public policy choices made have differed widely; and (3) they illustrate the efficiency argument for the advantages of pooling risk through public funding. The economic policy response to Covid-19 also illustrates these three themes. However, Covid-19 also is a very clear example of the importance of "externalities" to public policy. Externalities, in economics jargon, are those impacts of individual decisions on the well-being of others that are not reflected in market prices. Because externalities issues cannot be optimally resolved by the market mechanism, public policy is inescapable.

In a pandemic, each individual citizen's health and well-being depends critically on the health and behaviour of others. Because its implications are beyond any individual's control, Covid-19 has created problems that cannot be solved without public policy choices. Climate change has been the third issue addressed in this course, and in the basic sense that the well-being of all individuals is affected by a

common problem which can only effectively be addressed by public policy decisions, the Covid-19 and Climate Change crises fundamentally have much in common.

Covid-19 and Climate Change are both also problems that have not been seen before, so forecasts and choices are inevitably clouded by uncertainty. Although they differ dramatically in time scales, since the impacts of Green House Gases on Climate Change unfold over generations while the Covid-19 pandemic has hit with dramatic suddenness, they share the feature that costs and benefits in the present have to be compared to costs and benefits in the future. The economics literature on choice between uncertain benefits and costs at varying future dates is thus highly relevant.

Economic inequality is the fourth topic this class addresses. Even before the pandemic, population health was heavily influenced by inequality and poverty and the impacts of both Covid-19 and Climate Change are very unequally distributed. Perhaps most importantly, the resentments of the "left behinds" in an era of increasing economic inequality have produced, in many nations, a political process which seems often to be paralyzed by partisanship and unable to agree on, or to implement, the consistent policies needed to deal with the challenges of Covid-19 and Climate Change.

The course this year will focus on:
[1] the economic implications of Covid-19;
[2] the economic implications of Climate Change;
[3] the implications of increasing economic inequality.

Everywhere in the world, governments have to deal with these issues. But they have often made very different policy choices, with often different results. What can we learn from these differences? Thirty years ago, policy debates in Canada tended to be local in scope – inter-provincial comparisons were common but international comparisons were rare because it was hard to acquire good comparative international evidence and to learn from rigorous comparisons of international experiences. But the Internet now makes it easy to learn from international comparisons. This course therefor emphasizes comparison of the advantages and disadvantages of alternative policy models now in use in specific other jurisdictions around the world.

Specifically, we will be making comparisons within and between three main groups of jurisdictions:
 (1) the different states within the U.S.;
 (2) the "Anglosphere" – Australia, New Zealand, England, Scotland, Ireland, South Africa, etc.
 (3) the continental member nations of the European Union.
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Students will be assigned to one of three teams – labelled A, B, and C below. Each broad topic area will be covered in a series of lectures, followed by a class in which each team of students leads a discussion of the advantages and disadvantages of the policies now in use in specific jurisdictions within their group of jurisdictions. Teams will alternate their focus on the rotation below.

	Covid-19	Climate Change	Economic Inequality
USA	A	C	B
Anglo	B	A	C
EU	C	B	A

In Canada, civil servants prepare "briefing notes" on the advantages and disadvantages of policy options, for presentation to a Cabinet minister, who then suggests a policy to Cabinet. To mimic this process a little bit, students should think of their team as being asked by the relevant minister:

[1] What have the economic impacts of, and economic policy responses to, Covid-19 been in the USA? in other Anglo nations? in different nations of the EU? What are the advantages and disadvantages? What can Canada learn from their experiences?"

[2] What climate change policies have been adopted in different states in the USA? in other Anglo nations? in different nations of the EU? What are the advantages and disadvantages? What can Canada learn from their experiences?"

[3] What have economic inequality trends been, and what policy responses have there been, in the USA? in other Anglo nations? in different nations of the EU? What are the advantages and disadvantages? What can Canada learn from their experiences?"

Each person in team A, B and C will choose one jurisdiction in their group to analyze. Each student then prepares a briefing note which outlines the advantages and disadvantages of that particular jurisdiction's way of dealing with that policy issue.

For example, Team A will start by examining Covid-19 economic impacts and policy responses in different states within the USA and Team B will start by discussing the impacts and policy responses to Covid-19, and their implications, in different countries in the "Anglosphere" while Team C looks at the different EU nations. (For example, the German, French and Swedish responses to Covid-19 have important differences.) Team A will then go on to examine climate change policies in different Anglo nations and income distribution policies in different EU nations.

Cabinet ministers are busy people, so presentations have to skip the campaign rhetoric. Briefing notes need to be short, factual and focussed. To mimic somewhat this process in government, each student will make a presentation to class and circulate to the class a 2 or 3 page summary of how the issue was addressed in the jurisdiction of their choice. As well, each student is responsible for an individual assignment on each topic (see outlines below). There are no exams in this course. Marks will be assigned on the basis of 13% for each of three assignments and 20% for each of three presentations (plus a 1% bonus for the last).

		Due Date	Marks
Sept. 9 – October 7	**Economic Policy Responses to Covid-19**		
	Assignment - Calculation of present value	28-Sep	13%
	Presentations	-SEPT 28, OCT. 5 & 7	20%
Oct.19 - November 4	**Climate change Policies and their impacts**		
	Assignment: calculation of own carbon footprint	28-Oct	13%
	Presentations on climate change policies	OCT.28, NOV 2 & 4	20%

Nov. 16 - December 8	**Economic Inequality: Trends and Policies**		
	Assignment: Inequality and Poverty where I live	02-Dec	13%
	Presentations on inequality trends and policies to reduce inequality	DEC 2, 7 & 8	20%

At the start of each module, a list of relevant readings will be posted on Brightspace. The grading scheme for presentations is included below. Grading rubrics for each assignment will be posted on Brightspace.

The objectives of this course are:
1. To increase your useful knowledge – both empirical and analytical – about some of big issues of Canadian public policy.
2. To develop general skills that are useful in a wide variety of contexts later in life - specifically: team work, library and internet research, critical thinking, written and oral presentation, and the ability to give and receive constructive criticism.
3. To foster the habit of thinking through the long term implications of current decisions and to develop some of the necessary tools.
4. To provide some sense of the fun and importance of rigorous thinking about issues that really matter.

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<u>Assignment A</u>   Due: September 23rd, 2020

This assignment is about comparing costs and benefits over time – using the example of your own lifetime earnings, and the potential impact of pandemics. You should...

1.   Write a page or two describing what you think your most likely lifetime career path will be.

2.   Use your best guess to forecast the costs of your university education and your earnings and total income until age 65. Using those forecasts, and a spread sheet programme such as Excel, calculate the net present-value at 5% discount of your education costs and lifetime future income, up to age 65.

3.   Viral outbreaks are a recurring phenomenon. For example, the 2002–2004 SARS outbreak was an epidemic involving severe acute respiratory syndrome coronavirus which was first identified in Foshan, Guangdong, China, on 16 November 2002[1]. It affected 26 countries and resulted in more than 8000 cases in 2003.[2]
Suppose that we can expect, 30 years from now, a new virus to emerge (we can call it Covid-50). If the Covid-50 virus got out of control, as Covid-19 has, what impact would you expect that to have on your future lifetime income? Discuss the changes in income that you could expect and calculate how much of a change in the present value at 5% discount of your lifetime income (up to age 65) there would be.
Suppose that the new virus (Covid-25) emerges sooner, in 5 years, and similarly gets out of control. What impact would that have on the net present value of your lifetime income?
The 2002-2004 SARS epidemic demonstrated that it is possible to contain the impacts of a viral outbreak – but the public health system necessary for that requires continued expenditure, every year. How much would you be willing to pay annually in taxes to finance the public health system? What is the present value at 5% discount of those future tax payments? How large are those payments compared to pandemic costs and compared to the present value of your total future income.

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[1] https://www.cdc.gov/sars/about/fs-SARS.pdf
[2] https://www.who.int/ith/diseases/sars/en/

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<u>Assignment B</u>   Due: October 28, 2020

The Carbon Footprint of Personal Transportation

Canada is a big country and some people have argued that our large geographical distances are an important reason why Canadians have a relatively large carbon footprint, compared to other nations. The purpose of this assignment is: [a] to calculate the actual carbon footprint from personal transportation of a real person (who can be you, or a real person whom you interview, such as a parent or grandparent or sibling); [b] to calculate the present value of its cost and [c] to estimate the financial and behavioural impacts of carbon pricing on the personal travel of this real person.

For this assignment you should itemize the total distance, over the past year, that this real person travelled, specify the mode of travel, and calculate the tons of CO_2 emissions associated with that travel. [For example, if the person is you and you commuted 25 Kilometres in a Ram Charger V8 diesel pickup to your summer job every day for 106 days, but walked everywhere for the other 259 days of the year, you could calculate 106 * 2 * 25 * (litres diesel consumed by a Ram Charger per kilometre travelled) * (CO_2 content per litre diesel) <u>or</u> you could specify how many litres of diesel you purchased every week and calculate the CO_2 content]. Be specific about your assumptions and explain why they are reasonable.

1. How large was this person's personal transportation carbon footprint in the past year?
2. How would you expect this carbon footprint to change over the lifetime of this person? Discuss why and how their carbon footprint will change and make your best guess to forecast the total tonnes of CO_2 emissions for personal transportation for each year over their lifetime.
3. Green House Gases are a stock pollutant – i.e. emissions in any given year have an environmental impact both this year and for many years to come. There are varying estimates of the Marginal Social Cost of Carbon: a low range case ($41 US per tonne), mid-range or base case ($ 100 US) and high ($200 US) – corresponding to $51.25, $125 and $250 in 2016 Canadian dollars. Use these three values to calculate the social cost of the personal transportation carbon footprint of this person in the past year and each future year. What is the net present value at 5% discount of the present and future carbon footprint due to personal transportation of this person?
4. For this person, what would the financial impact of carbon pricing be if travel behaviour did not change? Calculate the financial impact at different carbon tax rates – e.g. $10 per tonne, $30, $50, $100, $200 or $300. In a given year, how large would this be as a fraction of this person's income?
5. What would you expect the behavioural impact of carbon pricing to be? If the carbon price were $10 per tonne, or $30, $50, $100, $200 or $300, would there be any change in this person's travel behaviour? If so, what behaviour would change – how much do you think that behaviour would change and at what carbon price? What would the implications be for CO_2 emissions?
6. Taking into account any change in travel behaviour, how much revenue would carbon pricing generate from this person's travel? What do you think should be done with that revenue? Why?

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<u>Assignment C</u>   Due: December 2nd , 2020

   If all of us were equally affected by Covid-19 and Climate Change and if the costs of public policies to address these issues were similarly the same for all individuals, public policy choices would be much simpler. But in fact the health and economic problems created by Covid-19, and the costs of addressing those issues, are very different for different groups in society – and the same is true for climate change. In the place where you live, who has been most and least affected by Covid-19 and will be most and least affected by climate Change? How has inequality and poverty affected the impacts, and the costs of remedies, of Covid-19 and Climate Change in the place where you live? How do those impacts where you live compare to the distribution of impacts world-wide?

   Note that Statistics Canada data on income and poverty trends can be obtained on specific census districts and urban areas, as well as for provinces and the nation as a whole and can be accessed at https://www.statcan.gc.ca/eng/topics-start/poverty or https://www150.statcan.gc.ca/n1/en/type/data. OECD data can be accessed at https://data.oecd.org/ Be sure to footnote your data sources <u>exactly.</u>

Other useful web sites are:
https://www.wider.unu.edu/project/wiid-world-income-inequality-database
https://ourworldindata.org/incomes-across-the-distribution
http://www.worldbank.org/en/topic/poverty
http://povertydata.worldbank.org/poverty/home/
http://stats.oecd.org/Index.aspx?DataSetCode=IDD
http://www.oecd.org/social/inequality.htm
http://inequality.org/
http://www.lisdatacenter.org/

Grading of ECON2218A Presentations

In this each student is e expected to prepare a briefing note which outlines the advantages and disadvantages of a particular jurisdiction's way of dealing with a policy issue. (e.g. how to deal with the economic implications of Covid-19). Students are asked to think of their team as being asked: "How do they do it in the USA? in other Anglo nations? in the EU? elsewhere? What are the advantages and disadvantages? What can Canada learn from their experiences?"
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Hence, the briefing note should:
1. Outline the trends and economic impacts in your jurisdiction.
2. Outline how your particular jurisdiction actually now deals with this policy issue:
3. Outline the advantages of this policy stance;
4. Outline the disadvantages of this policy stance.
5. State clearly what Canada can learn from this jurisdiction's experiences.

Grading (1) – 6 marks:
Has the briefing note
- missed important aspects of the policy context or delivery?
- adequately summarized policy delivery?
- provided valid, relevant evidence, preferably numerical and contextualized?
- used credible and attributed sources, supporting all assertions made?
- avoided extraneous, irrelevant issues and vacuous verbiage?
- focussed on the facts, avoiding ideology and/or political rhetoric?

Grading (2), (3) and (4) – When the briefing note discusses advantages, disadvantages, and lessons for Canada, does it address:
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- *Efficiency impacts: i.e. How large are possible impacts on aggregate output?*
- *Equity impacts: i.e. do particular groups in society disproportionately receive benefits or incur losses? Who are they? How unequal are such benefits and costs?*
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  Total of 6 marks, spread over 3 questions.

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+ maximum 3 marks for delivery
– total graded out of 15