

Course Outline
Economics 446
Advanced Public Economics

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Introduction

For this course, you will write a paper on some aspect of the economics of public policy, using quantitative data. The objective of the course is to learn how economists formulate and test ideas, to learn about public policy, and to enhance your skills in working with data. Working in groups of 2-5 students, you will tackle a specific public policy issue (see the list below), and use recent Canadian data to answer some key questions that you will develop based on the suggestions below.

Your group will conduct original research, but you will be guided by the questions, approaches, and empirical methods that were used in an existing, published research paper. *Replication* is the scientific practice of repeating the research of other researchers and comparing your results to theirs. Your project will be a partial replication exercise: you should use the published paper as your guide and attempt to produce results analogous to some of those in the published paper. But you will use different (more recent, Canadian) data, and you can be creative in your research, extending it in new and different directions.

Most of these questions can be answered with simple data sets and ordinary least squares regression techniques. However, it is also important to understand your data before performing regressions. Simple descriptive statistics and data visualizations should be an important part of every group's paper. (In some cases, a good paper could be written with descriptive statistics alone, without using regression methods at all.) If you develop your ideas, do some reading, and do some hands-on work with data, then you can expect to have fun, learn something, and succeed in this course!

Software and Supplementary Readings

You should acquire your own statistical software package and install it on your computer. While for some projects Excel may be sufficient, I recommend Stata/IC, available from <http://sites.utoronto.ca/ic/software/detail/stata.html>. A good basic introduction to Stata with links to many additional resources is at data.princeton.edu/stata. For more Stata links see www.stata.com/links.

There is no textbook for this course, but you may wish to consult an econometrics textbook for some aspects of your research. Two good alternatives:

Wooldridge, J.M., 2015. *Introductory econometrics: A modern approach*. Nelson Education.

Angrist, J.D. and Pischke, J.S., 2014. *Mastering 'metrics: The path from cause to effect*. Princeton University Press.

Grading

Research Proposal	5%
Literature Review	15%
Class Presentations	25%
Class Participation	15%
Final Paper	40%

Late papers will be assigned a penalty of 10% per week. Note: Every group member must contribute to either Class Presentation #1 or #2 (see below).

Assignments

You will prepare short written and oral reports throughout the term as follows:

1. Research proposal (2 pages, one per student): A brief report that indicates in your own words: (i) your topic, including a clearly stated research question to be answered by your empirical work; (ii) data sources for your empirical analysis; (iii) a short list of published research papers you intend to read and draw on for your work.
Due: Week 3, Monday. Points: 2
2. Work plan (2 pages, one per group): Identify the key tasks for your project, including literature review, obtaining data, and planned tables and figures for your paper. For each task, identify which group member has primary responsibility and when the task will be completed.
Due: Week 3, Friday. Points: 3
3. Class presentation #1: Prepare a 15-minute presentation on your policy questions and the key paper that will guide your work. A class discussion will follow each presentation.
Due: Weeks 4-5. Points: 10
4. Literature review (3-6 pages, one per group): A brief summary of what key papers on your topic have found, their implications for your key research question, and how their methods relate to your own empirical strategy. Review 2-3 papers in detail, and discuss others more briefly if appropriate for your work.
Due: Week 5, Thursday. Points: 15
5. Peer evaluation (1 page, one per student): Each student will be assigned to read the literature review of another group and submit brief comments and evaluation. A rubric will be provided.
Due: Week 6, Tuesday. Points: 2 (part of Class Participation)
6. Preliminary empirical results (2-3 pages, one per group): A document showing your main empirical strategy (for example, a regression equation) and one table of empirical results (e.g. variable means, crosstabs, or preliminary regression estimates). Attach stata do and log files.
Due: Week 8, Monday. Points: 3 (part of Class Participation)
7. Class presentation #2: Come to class for a short, informal presentation of your ideas and preliminary results. A class discussion will follow each presentation (30 minutes per student total).

Due: Weeks 10 and 11. Points: 15

8. Final paper (approx. 20 pages): A complete paper including introduction with clearly stated research objectives, literature review based on your earlier submission, description of data and empirical strategy, and empirical results. Attach stata do and log files.

Due: Week 12, Tuesday. Points: 40

Schedule

There are no regular lectures in this class. Instead, we will use scheduled class time for guided group work and student presentations, as follows (precise schedule for group presentations to be determined):

Week 1: Introduction

Week 2: Computer Lab: Software and data sources

Week 3: Computer Lab: Introduction to data analysis

Week 4: Student Presentation #1: Literature review

Week 5: Student Presentation #1: Literature review

Week 6: Guided Group Work: Bring your computer

Week 7: Guided Group Work: Bring your computer

Week 8: Progress Report: Be prepared to discuss your preliminary results with the class

Week 9: Progress Report: Be prepared to discuss your preliminary results with the class

Week 10: Guided Group Work: Bring your computer

Week 11: Student Presentation #2: Preliminary data analysis

Week 12: Student Presentation #2: Preliminary data analysis

Topics

Choose a project to work on. Sign up at [this google sheet](#) (maximum 5 students per group).

1. Minimum wages, employment, and earnings

Paper: Reich, Michael and Allegretto, Sylvia and Godøy, Anna, Seattle's Minimum Wage Experience 2015-16, <https://ssrn.com/abstract=3043388>.

Issues: How has Ontario's minimum wage increase affected employment, earnings, and the welfare of low-wage workers? Examine changes in employment and weekly earnings in Ontario by industry since 2010. Are they higher or lower than they would have been had the minimum wage remained unchanged? Are the effects visible (i) in the aggregate? (ii) in industries where minimum wage employees are most prevalent?

Research objectives: Use the methodology in the Seattle paper to estimate what employment and earnings would have been in the absence of the policy change. (For more detailed description of the methodology, read other papers by the same authors, or see Abadie, Alberto, Alexis Diamond and Jens Hainmueller 2010. "Synthetic Control Methods for Comparative Case Studies." *Journal of the American Statistical Association* 105, 490: 493-505.)

Data sources:

- [Average weekly earnings by industry, monthly, unadjusted for seasonality](#)
- [Employment by industry, monthly, unadjusted for seasonality](#)
- [Minimum wages by province](#)

Note: This project requires somewhat more knowledge of regression analysis and Stata programming, compared to other projects.

2. Minimum wages and consumer prices

Paper: Aaronson, D., 2001. Price pass-through and the minimum wage. *Review of Economics and Statistics*, 83(1), pp.158-169, <https://doi.org/10.1162/003465301750160126>.

Issues: Are minimum wage increases passed through to consumers in the form of higher prices? What are the consequences for the progressivity or regressivity of minimum wages?

Research objectives: Using more recent data on Canadian provinces (not US states) and the methodology in the Aaronson paper, estimate the pass-through effect of minimum wage increases on restaurant prices. Based on your estimates, how does this affect the welfare of low-income households?

Data sources:

- [Consumer prices](#)
- [Minimum wages by province](#)
- Data on expenditure patterns of low-income and high-income families

3. Income taxes on the rich

Paper: Milligan, K. and Smart, M., 2015. Taxation and top incomes in Canada. *Canadian Journal of Economics*, 48(2), pp. 655-681, <https://doi.org/10.1111/caje.12139>.

Issues: Top marginal income tax rates on the rich increased at the federal level in 2016, and have increased in most provinces since 2010. What is the impact of this change on government revenues, redistribution, and economic efficiency?

Research objectives: The Milligan-Smart study uses data up to 2011, which misses the most recent tax changes. Using the same methodology, update the estimates, and use them to estimate the effect of recent tax rate changes on tax revenues of federal and provincial governments. Were the tax rate increases justified?

Data sources:

- [High income tax filers in Canada](#)
- [Top Marginal Tax Rates](#)

Note: You might also want to use more detailed data from the Canada Revenue Agency on incomes and tax payments (<https://www.canada.ca/en/revenue-agency/programs/about-canada-revenue-agency-cra/income-statistics-gst-hst-statistics/preliminary-statistics.html>)

4. Tobacco taxes, smuggling, and smoking cessation

Paper: Gruber, J., Sen, A. and Stabile, M., 2003. Estimating price elasticities when there is smuggling: the sensitivity of smoking to price in Canada. *Journal of Health Economics*, 22(5), pp.821-842, [https://doi.org/10.1016/S0167-6296\(03\)00058-4](https://doi.org/10.1016/S0167-6296(03)00058-4).

Issues: Are high cigarette taxes an effective way to reduce smoking, or do smokers substitute towards smuggled and other untaxed purchases? What is the price elasticity of demand for cigarettes, and how has it changed since new alternatives to taxed cigarette purchases have been introduced (such as bootlegged cigarettes and e-cigarettes)?

Research objectives: Update the paper to more recent years. Can you estimate the price elasticity of legal sales, consumption, and smoking propensity? Can you estimate the proportion of tobacco consumption that escapes taxation in each province?

Data sources:

- Cigarette prices: [Consumer Price Index, annual average, not seasonally adjusted](#)
- Legal sales: [Cigarette sales](#)
- Tobacco purchases: [Detailed household final consumption expenditure, provincial and territorial, annual](#)

5. Immigration and income mobility

Paper: Aydemir, A., Chen, W.H. and Corak, M., 2009. Intergenerational earnings mobility among the children of Canadian immigrants. *The Review of Economics and Statistics*, 91(2), pp.377-397, <https://doi.org/10.1162/rest.91.2.377>.

Issues: Do the children of immigrants to Canada have the same economic opportunities and economic outcomes as the children of the native-born population? What is the degree of intergenerational income mobility of Canadians, and how quickly do immigrant families “catch up” to the native population?

Research objectives: Aydemir et al. (2009) examine the incomes of immigrants and native-born in Canada from the 2001 Census, and relate the experience of second-generation immigrants to the incomes of their parents in the 1981 Census. To the extent possible, perform the same analysis using data from the 2016 Census, and making comparisons to data on immigrant parents in the 1996 Census. Replicate Tables 2 and 7, and Figure 1 from this paper using your data. Present further analysis based on other tables in Aydemir et al. or other papers, as appropriate.

Data sources:

- [Visible Minority, Income Statistics, Generation Status, Age and Sex for the Population Aged 15 Years and Over in Private Households of Canada, Provinces and Territories, Census Metropolitan Areas and Census Agglomerations, 2016 Census - 25% Sample Data](#)
- [Visible Minority, Economic Family Income Decile Group, Generation Status, Age and Sex for the Population in Private Households of Canada, Provinces and Territories, Census Metropolitan Areas and Census Agglomerations, 2016 Census - 25% Sample Data](#)
- [Census of Canada, 1996: public use microdata on individuals](#)
- Data in Aydemir et al. (2009)

Note: For this project, you must use the 1996 Census microdata to create the necessary cell means for analysis. But it is not necessary to perform regression analysis using the microdata.

6. Ethnic diversity and social trust

Paper: Alesina, A. and La Ferrara, E., 2002. Who trusts others? *Journal of Public Economics*, 85(2), pp.207-234, [https://doi.org/10.1016/S0047-2727\(01\)00084-6](https://doi.org/10.1016/S0047-2727(01)00084-6).

Issues: How is trust in other people and in government institutions changing in Canada? Who trusts the most (least), and how is it related to their individual backgrounds and characteristics of the places they live? Does ethnicity and ethnic diversity play a role in the evolution of social trust?

Research objectives: Using micro survey data on attitudes from the General Social Survey for Canada in 2003 and 2013, replicate Tables 1, 2, and 5 from Alesina and La Ferrara (2002). To the extent possible, also replicate Tables 3 and 6 (on local heterogeneity and trust). More generally, examine how trust has evolved over time, and how it is related to attitudes to (and experience of) ethnic diversity and discrimination?

Data sources:

- [General Social Survey, 2003](#)
- [General Social Survey, 2013](#)
- Census data on immigration and ethnic fractionalization

Note: This project requires somewhat more knowledge of regression analysis and Stata programming, compared to other projects, including regression analysis of microdata.

Turnitin

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.