Introduction

This course deals with optimal taxation, i.e. how a government fulfills given objectives, such as financing exogenous expenditures and redistributing income, in the best possible way. Taxes are generally distortionary and the minimization of these distortions is an integral part of designing an optimal tax system. The goal is to cover extensively three mainstays of optimal taxation: commodity taxation, taxation of intermediate goods, and income tax schedules.

The first few sessions will be mainly lectures. Afterwards, the general idea is to have something like a lecture or presentation in one half and a discussion of pre-assigned articles in the other half. It is therefore crucial that you read the assignments! Hopefully, this will also help you find a topic for a thesis or dissertation, though.

Textbooks

I will mainly rely on one book:


If you get hold of the previous edition, that should work well, too, although the organization of the chapters changed somewhat and some errors have been rooted out. Overall, it is not the most expensive book though. The following books are all available in the library, I will put them on reserve. For a lighter introduction and some exposition to the Canadian tax system, see

An older but useful reference is the classic  
For advanced students who would like to do structural research on optimal taxation, I recommend  
For a usually good introduction to the literature of diverse topics in taxation, see  
Some useful reading on Ramsey taxation can be found in Chapter 12 (there are also newer editions available) of  
A comprehensive approach to taxation within public economics is  

**Preparation**

I assume that you know micro- and, to a certain degree, macroeconomics fairly well. If you feel uneasy about your skills in these fields, you might brush up your knowledge on static and dynamic optimisation. The concepts of compensating and equivalent variation should be well-understood. Varian and Romer for example could be helpful and Mas-Collel, Whinston, and Green is an excellent reference. But we will go over the models in detail in class and you are encouraged to ask questions and come to office hours.
Evaluation

There are five graded components for this course:
Computational assignment: 20%
Two analytical assignments: 15% each
One in-class presentation: 20%
Class participation: 10%
One short essay: 20%

The computational assignment asks you to write code in the program of your choice (use Matlab as default, it is available in the lab) to evaluate the general equilibrium outcome of a tax. I will provide some help to get started. The analytical assignments are classic problem sets. For all assignments, you are encouraged to work in small groups. For the in-class presentation, you have to present a modern research paper. Student participation in class discussions is important, I expect you to read assigned papers and be able to discuss them. When you do not understand something, that is fine, but you should point out what it is that you had problems with. I will ask questions about the assigned papers (I announce them the week before). The essay is short (4 pages, 12pt, 1.5 lines) and asks you to summarize your opinion on two of the “lessons” in Mankiw, Weinzierl, and Yagan (2009). State what arguments would speak for and against it and discuss the main concepts. This has to be your own work and written in your own words. If you have questions about plagiarism, please refer to university policies or talk to me.

The essay is to practice writing convincingly about economic issues. The in-class presentation of an article is both to practice your presentation skills and to have you read and understand an article in a lot of detail. The two classic problem sets have the objective to train technical skills. The computational assignment can be tremendously helpful in understanding the underlying mechanisms of the model. Furthermore, much of the current research relies on numerical simulations. The ability to understand and write code is thus a valuable skill.
Course Outline

This is a tentative list of topics that we will cover. We can change it depending on students’ interests and in how much detail we want to cover each topic. All papers can be accessed easily through university computers; finding them is part of your work, but should not take more than two minutes each (also avoids copyright issues). Of course, if you have trouble finding them, I will gladly provide assistance.

- Introduction: 08-January.
  Chapter 1 in Salanié. Chapters 2 and 3 in Atkinson-Stiglitz.
- Tax Incidence: 22-January.
  How large are the welfare losses due to tax evasion? A non-technical memo on the importance of behavioral changes can be found in Feldstein (2008). Feldstein (1999) shows how one can use the elasticity of tax revenues to potentially capture all of these changes, whereas Saez, Slemrod, and Gertz (2012) in their review article view this critically. One of the most prominent examples of measuring the elasticity of tax revenues is Feldstein (1995). Milligan and Smart (2013) is an interesting application to Canada, with special emphasis on the federal nature.
- Optimal Commodity Taxation and Production Efficiency: 05-February.
  Chapter 3 in Salanié. Chapter 12 in Atkinson-Stiglitz. The original paper was by Ramsey (1927) leading to the inverse-elasticity rule and when one allows for an elastic labour supply, Corlett and Hague (1953) show how goods more complementary with leisure should be taxed more. There are also the classic papers by Diamond and Mirrlees (1971a,b) who established production efficiency.
• Optimal “Ramsey Taxation:” 12-February.


• Time-inconsistency: 26-February.

Kydland and Prescott (1977) is the most famous article, Fischer (1980) provides a simple discussion and Kydland and Prescott (1980) explore how to solve the optimal tax problem recursively. The literature on timeless commitment should also be interesting in this respect: see Woodford (1999), Woodford (2001), and Jensen and Mccallum (2010).

• Capital Tax Competition: 05-March.

Zodrow and Mieszkowski (1986) and Wilson (1986) are classic papers in the static tax competition literature; Wilson and Wildasin (2004) provide a good overview. Mendoza and Tesar (2005) and Klein, Quadrini, and Rios-Rull (2005) use dynamic models with commitment and a time-consistent approach, respectively. This is what I have worked on, Gross (2014, 2015) and Gross, Klein, and Makris (2017).

• Intergovernmental Transfers: 12-March.

Smart (1998) shows that distortionary taxes may actually increase as a function of transfers and Köthenbürger (2002) and Bucovetsky and Smart (2006) argue that this may improve efficiency under tax competition. Empirically, Baretti, Huber, and Lichtblau (2002) find that transfers tend to reduce tax revenues of states in Germany. The results by Smart (2007) suggest that tax revenues increase in transfers in Canada. Büttner (2006) and Egger, Köthenbürger, and Smart (2010) find that fiscal equalization leads to higher business tax rates of municipalities in Germany. I have also worked on this, Gross (2017).

• Optimal Income Taxation: 19-March.

Chapter 4 in Salanié. Chapter 13 in Atkinson-Stiglitz. Mirrlees (1971) is the starting point, Diamond (1998) and Saez (2001) are interesting applications. Lehmann, Simula, and Trannoy (2014) discuss how results differ when there is labor migration.
Mixed Taxation: 26-March.


Tagging: 02-April.

From an optimal taxation perspective, people’s characteristics that are positively correlated with ability should be taxed, such as height: Mankiw and Weinzierl (2010). On the other hand, it is rarely observed in practice, so Weinzierl (2014) argues that there might be additional principles influencing taxation, besides the equity-efficiency trade-off.

Policy Implications: 09-April.

We discuss the review articles by Diamond and Saez (2011) and Mankiw, Weinzierl, and Yagan (2009).

Formalities

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, see www.carleton.ca/equity/accommodation/student_guide.htm. Any form of cheating and plagiarism is of course not allowed and will be dealt with according to University policies and guidelines. For more information, visit www.carleton.ca/studentaffairs/academic_integrity/index.html. Students who can document a compelling reason for missing an assignment will be excused and their final grade will be based on their performance in the rest of the course; i.e., the weight of each of the remaining evaluation instruments will rise by a factor of $Y$, where $Y = 100/(100 - X)$, with $X$ being the weight of the missed evaluations. Students must inform the instructor of such an absence in advance, if possible.

Note on Copyright

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References


