EC426 Public Economics 2017-18

Review your lecture notes and the slides in preparing the questions. A presentation should be about 15 minutes to allow discussion time.

Class 1 (MT week 2):
Introduction, Class Logistics, MSc Dissertation

Class 2 (MT week 3): From topic 1
1. In the US, the time that people can receive unemployment benefits is extended during recessions. Use the Baily formula to shed light on this particular design of the UI system in response to business cycle effects?
2. Extend the Baily model with a savings decision (e.g., allow individuals to give up some consumption when employed *s*, to increase their consumption when unemployed by *s(1+r)*). How does this affect the Baily formula? How do you expect this to affect the consumption smoothing benefits?

Class 3 (LT week 4): From topics 1-2
1. Discuss the empirical approach and results in Gruber (1997). Why can he not compare the consumption drop for individuals with high replacement rate and low replacement rate? Can he just compare the average consumption drop in states with different UI generosity? How does he deal with the fact that he doesn't observe take-up of unemployment benefits?
2. Compare the efficiency of the competitive equilibrium in a market with moral hazard and a market with adverse selection. Is there a role for a government in both markets?

Class 4 (LT week 5): From topics 2
1. Consider the graphical representation in Einav et al. (2010). For a given demand function, how would differences in incomes affect the cost curve related to that demand function? What would happen if people with higher income have better health? How does this affect the welfare cost of adverse selection?
2. Is the increase in healthcare spending a problem? Discuss some of the factors driving the increase in spending according to Newhouse (1992) and how these affect your view?

Class 5 (LT week 6): From topic 3
1. Consider the lifetime consumption model with uncertainty about the time of death. When people get utility from leaving a bequest, how does that change their willingness to annuitize their wealth? Will the level one bequeaths depend on when one dies?
2. Discuss the evidence for the behavioural response to a pension subsidy in Chetty et al. (2012). How do they argue that behavioural responses are heterogeneous?

Class 6 (LT week 7): From topic 4
1. Consider the analysis of the Tennessee STAR project in Chetty et al. (2011). What does the regression of students' long-term outcomes on the "leave-out" means of the class mates' scores capture? What potential impact of teachers and peers is this not capturing? Can we distinguish between the impact of teachers and peers? What if we observed students' scores over two years with the teachers randomly re-allocated to the different classes in the second year? Discuss whether this analysis would be useful to guide policy on teacher recruitment/retention and on assigning students to different classes?
2. Consider the analysis of the importance of the Tiebout mechanism in Hoxby (AER, 2000). How does she measure school competition? What else could be affecting the correlation between school competition and school productivity? Discuss and evaluate her strategy to identify the causal impact of school competition.

Class 7 (LT week 8): From topic 5

1. Discuss the different models of smoking/addiction in light of the revealed preference paradigm. What would be a policy that satisfies a libertarian paternalist?
2. Revisit the Baily model as covered in lecture (with no savings) when individuals perceive   their probability to find a job as pi_hat(e) rather than pi(e)?
   a. Write the Lagrangian that characterizes the optimal policy when welfare is determined by the true expected utility.
   b. Differentiate the Lagrangian with respect to benefits. Discuss the potential use of envelope conditions.
   c. Derive a Baily-type formula that accounts for the suboptimal search behavior captured by pi_hat'(e) – pi'(e).
   d. Would a policy maker who implements the standard Baily formula set the benefit level too high or too low? Would the optimal benefit level be lower or higher than when beliefs are unbiased?

Class 8 (LT week 9): From topics 5 and 6

1. Consider the empirical analysis in Handel and Kolstad (AER 2015). First, discuss some reduced-form evidence suggesting that information frictions drive insurance choices. Second, the structural estimation depends on a choice model and a cost model. Briefly discuss the approach underlying the cost model. Finally, wow are the risk preference estimates affected by augmenting the model with friction dummies?
2. Starting from the Lagrangian in the Ramsey model, provide the different steps that lead to the Ramsey rule and the inverse elasticity rule in particular. Is it plausible that uniform commodity taxation is optimal?

Class 9 (LT week 10): From topics 6 and 7

1. Consider agents with heterogeneous preferences or income in a many-person Ramsey model. Assuming that compensated cross-elasticities are zero. Allowing the social marginal utility of income to be individual-specific, how does the optimal tax on a commodity change?
2. Assume a quasi-linear utility function, which is linear in consumption c and iso-elastic in hours worked z/n, with z denoting earnings and n denoting ability. Individuals face a nonlinear income tax $T(z)$. Derive the earnings supply function. Interpret the result.

Class 10 (LT week 11): From topic 7

1. Assume the top tail of the ability distribution is Pareto, i.e. the density distribution of n is given by $f(n) = k/n^{1+a}$ where a is the Pareto parameter. Given this distribution, the preferences described above, and a social welfare weight (in terms of the marginal value of public funds) on high-ability individuals equal to g, derive the optimal top marginal tax rate. Interpret the result.
2. Discuss the reasons for a commodity tax in the Atkinson-Stiglitz model. Compare this to your conclusions in the "Many-Person Ramsey model".

Class 11 (LT week 2): From topics 11-12

1. Describe the difference-in-differences approach and its identification assumptions.
2. Discuss Eissa and Liebman (1996):
   a. Describe the impact of the EITC program on labor supply incentives.
   b. Compare difference-in-differences estimates based on the categorical and means-testing aspects of the EITC, respectively, and discuss the potential issues with each.
   c. Evaluate the longer time-series evidence presented in the paper. Are you convinced?
   d. Propose a triple-differences strategy and discuss if that would be useful in this context.

Class 12 (LT week 3): From topics 11-12

1. Discuss Saez (2010) and Chetty et al. (2011) [see also Kleven 2016]:
   a. Describe the kink-based bunching approach and its identification assumptions.
   b. Discuss the absence/smallness of bunching around many kink points. What are the possible interpretations?
2. Discuss Kleven and Waseem (2013) [see also Kleven 2016]:
   a. Describe the notch-based bunching approach and its advantages/disadvantages over the kink-based approach.
   b. Discuss the Kleven-Waseem findings, especially with respect to optimization frictions and the difference between observed and structural elasticities.

Class 13 (LT week 4): From topic 13

1. Why focus on taxable income elasticities? Discuss the relationship between such elasticities and deadweight loss.
2. Discuss Kleven and Schultz (2014):
   a. Describe the empirical strategy
   b. What are the key empirical advantages compared to US studies?
   c. What are the key findings?

Class 14 (LT week 5): From topic 14-15

1. Consider the partial equilibrium model of tax incidence discussed in the lecture. Let p denote the pre-tax price and $q = p+t$ denote the tax-inclusive price.

   a. Assume first that changes in prices and taxes are equivalent. Show that $\frac{dp}{dt} = \frac{\frac{\partial D}{\partial p}}{\frac{\partial S}{\partial p} - \frac{\partial D}{\partial p}} = \frac{\varepsilon_D}{\varepsilon_S - \varepsilon_D}$ and $\frac{dq}{dt} = \frac{\varepsilon_S}{\varepsilon_S - \varepsilon_D}$ in the case of $q=p+t$. Then show that the side of the market on which the tax is levied administratively does not matter.

   b. Discuss under which circumstances the tax neutrality result does not hold.

   c. Consider now the Chetty et al (2009) setup on salience and taxation. Define $\varepsilon_{D,t} = \frac{\partial D}{\partial t}\frac{p}{D}$, $\varepsilon_{D,p} = \frac{\partial D}{\partial p}\frac{p}{D}$ and $\varepsilon_{S,p} = \frac{\partial S}{\partial p}\frac{p}{S}$. Define also $\theta = \frac{\varepsilon_{D,t}}{\varepsilon_{D,p}}$, where $\varepsilon_{D,t}$ is the percentage change in demand caused by a 1% increase in the total price through a tax change, and $\varepsilon_{D,p}$ is the percentage change in demand caused by a 1% increase in the total price through a change in p. Show that the tax neutrality result does not hold. Derive expressions for $\frac{dp}{dt}$ and $\frac{dq}{dt}$, and compare to those obtained in part (b). How would you interpret θ?

2. Discuss Kleven, Landais, Saez & Schultz (QJE, 2014):
   a. Describe the empirical strategy to identify the incidence of taxes on the earnings of top-skilled individuals
   b. Why can this strategy identify rent sharing as opposed to standard partial equilibrium incidence?

c. What does the bunching analysis reveals in terms of the relative bargaining weights of workers and firms

Class 15 (LT week 6): From topic 14-15
1. Discuss Lalive, Landais, & Zweimuller (AER, 2016):
   a. Describe the empirical strategy to identify the incidence of UI on labor market tightness
   b. Explain what random matching means. How can we identify the presence of random matching in the labor market?
   c. Define the micro effect of UI on labor supply. Define the macro effect of UI on employment. What do the results in LLZ reveal in terms of the relative magnitude of micro vs macro effects
   d. Explain what assumptions regarding models of the labor market can help create positive incidence effects of UI benefits on labor market tightness. Can the assumptions underlying these models be tested empirically?

Class 16 (LT week 7): From topic 16
1 Inequality and welfare basics:
   a. Consider the utility-possibility diagram depicted in the lecture (also in Atkinson and Stiglitz 2015, 11-2). Redraw the diagram for the case where income is fixed and (i) utility equals income (ii); utility is proportional to income, but the utility function differs across individuals; (iii) everyone has the same utility function but utility also depends on other people's income.
   b. Suppose social welfare is to be measured by mean×(1 − Gini): which of the welfare axioms (if any) is violated by this SWF?
   c. Use the information on the distribution of income, taxes and benefits in the UK to explain how standard tools of distributional analysis can be used to infer whether particular types of taxes/benefits are progressive or regressive. – Jones, F. (2008) "The effects of taxes and benefits on household income, 2006/07," *Economic and Labour Market Review*, **2**, 37-47.
2 The SWF in the light of personal preferences and perceptions:
   a. What is the argument for basing social welfare function on individual expected-utility functions? Can one therefore associate inequality aversion with risk aversion?
   b. What are the problems highlighted by Carlsson et al (2005) and by Cowell and Schokkaert (2001) in making this association?
   c. How do biased perceptions of the income distribution affect the expressed preferences for redistribution? How may they therefore bias estimates of social weights?

Class 17 (LT week 8): From topic 17
1 Mobility and equality basics:
   a. What principles should a mobility index satisfy?
   b. Does greater mobility imply greater equality of opportunity? (Van de gaer et al, 2001)
2 Mobility in the light of personal preferences and perceptions:
   a. Can an objective of greater mobility be reconciled with (i) individual risk aversion and (ii) standard social-welfare functions?
   b. Can mobility be considered as a substitute for income-redistribution programmes?
   c. What are the implications for economic policy making of the evidence on perceptions of mobility?

Class 18 (LT week 9): From topic 18-9

1. Measurement issues
   a. In what ways does the problem of measuring wealth inequality differ from (i) income inequality? (ii) health inequality?
   b. Why might Lorenz comparisons of net worth be problematic?
   c. What are the advantages and drawbacks of the capitalisation method for estimating wealth distributions?
2. Wealth accumulation
   a. Assess the empirical validity of alternative theories of the bequest motive.
   b. Is there a retirement savings puzzle?
   c. What would be the long-run effect of an interest rate rise on the composition of personal asset-holdings and wealth inequality?

Class 19 (LT week 10): From topic 18-9

1. Effect of inheritance tax and transfers
   a. What problems are involved in assessing the long-run impact of eliminating inheritance tax on the pattern of wealth holding?
   b. Consider the impact on wealth inequality of a capital endowment funded by inheritance tax: would it matter if this endowment was made early or late a person's lifetime?
2. Family structure and the impact of taxation:
   a. Suppose there is a tendency to form marriage partnerships with persons outside one's own wealth class. Assess the likely implications the long-run impact of inheritance tax on the distribution of wealth.
   b. Consider a policy of encouraging an increase in the birth rate. What would you expect to be the effect on wealth inequality in the long run?

Class 20 (LT week 11): From topic 20

1.
   a. Evaluate available methods for eliciting peoples' valuation of externalities and public goods (Diamond and Hausman JEcPersp 94, Levinson JPubE 2012)
   b. Using a supply-demand diagram explain how to interpret the implied dead-weight loss arising from (i) consumption externalities (ii) production externalities.
   c. Consider the pollution externality from the production of cars, but assume that the externality damage is uncertain. Illustrate the ex post welfare loss from a tax policy that is based on the expected damage. Do the same for a policy that regulates car production based on the expected damage. Which policy seems better when the demand become more price-inelastic?
2.
   a. Should lotteries be used more extensively to fund public-goods provision?
   b. Are provision-point mechanisms more effective at providing public goods than voluntary-contribution schemes?