

It is useful to review your lecture note and, the lecture slides in preparing the following questions. Most readings are available using the hot links or <http://zw4gk5cr3l.search.serialssolutions.com/>

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 classmates' 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, how 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”.