

It is useful to review your lecture notes and the lecture slides in preparing the following questions. Most readings are available using the hot links or <http://librarysearch.lse.ac.uk/>.

Class 1 (MT week 2): From topic 1

1. What is the argument for basing social welfare function on individual expected-utility functions? Can one therefore associate inequality aversion with risk aversion? What are the problems highlighted by [Carlsson et al \(2005\)](#) and by [Cowell and Schokkaert \(2001\)](#) in making this association?
2. (a) Suppose social welfare is to be measured by $\text{mean} \times (1 - \text{Gini})$: which of the welfare axioms (if any) is violated by this SWF? (b) Suppose that the government introduces an income tax of the form $T_i = t[x_i - K]$, where T_i is individual i 's tax liability and x_i his income before tax, $0 < t < 1$ and $K \geq 0$. Describe the economic role of the parameters t and K . If the value of the Gini coefficient for pre-tax income is known to have the value G_0 find G_1 , the value of the Gini coefficient of post-tax income.
3. 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 (a) particular types of taxes/benefits are progressive or regressive and (b) the distribution of final income is "better" than the distribution of original income. – [Jones, F. \(2008\)](#) "The effects of taxes and benefits on household income, 2006/07," *Economic and Labour Market Review*, **2**, 37-47.

Class 2 (MT week 3): From topic 2

1. Does greater mobility imply greater equality of opportunity? ([Van de gaer et al, 2001](#))
2. Can an objective of greater mobility be reconciled with (a) individual risk aversion and (b) standard social-welfare functions?
3. To what extent can mobility be considered as a substitute for income-redistribution programmes?

Class 3 (MT week 4): From topic 3

1. Assess the implications of alternative theories of the bequest motive for the design of taxes on the transmission of wealth. ([Cremer and Pestieau 2006](#), [Kopczuk 2013](#))
2. What problems are involved in assessing the long-run impact of eliminating inheritance tax on the pattern of wealth holding? ([Cremer and Pestieau 2006](#), [Cowell 2012](#))
3. 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. ([Champernowne and Cowell 1998](#), Piketty 2014)

Class 4 (MT week 5): From topic 4

1. (a) What methods are available for eliciting peoples' valuation of public goods? ([Levinson 2012](#)) (b) Show with an example that the pivotal mechanism in the $\{0,1\}$ public-goods problem induces truth telling.
2. Should lotteries be used more extensively to fund public-goods provision?
3. Are provision-point mechanisms more effective at providing public goods than voluntary-contribution schemes?

Class 5 (MT week 6): From topic 5

1. (a) What is the relevance of the participation constraint in OIT? (b) What is the incentive-compatibility constraint in OIT? (c) Compare the role of the IC constraint in linear income taxation with that in non-linear income taxation. (Salanié, 2003 part II).
2. Is there an economic case for taxing luxury goods more heavily than others?
3. Is there a case for eliminating commodity taxation?

Class 6 (MT week 7): From Lectures 6-7

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 7 (MT week 8): From Lectures 6-7

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 8 (MT week 9): From Lecture 8

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 9 (MT week 10): From Lectures 9-10

1. 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.
2. 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.
3. Relate the result above to the no-distortion-at-the-top result and to the top Laffer rate.

Class 10 (MT week 11): [Revision]

Class 11 (LT week 2): From Lectures 9-10

1. Consider a pure extensive-margin optimal tax model with fixed work costs (similar to Saez 2002). Define the participation tax rate in this framework. Derive the optimal participation tax rate using a perturbation approach, and discuss the optimal tax rule. Is an EITC optimal?
2. Consider the statement “research have found that the extensive margin elasticity is larger than previously thought, which strengthens the argument for an EITC that supports participation incentives at the bottom of the distribution.” True or False? Discuss.

Class 12 (LT week 3): From Lecture 11

1. Present the Nichols-Zeckhauser argument for in-kind transfers. What is the condition under which in-kind transfers are optimal? Provide intuition.
2. Relate the Nichols-Zeckhauser argument to the Atkinson-Stiglitz result on the condition under which commodity taxes/subsidies are suboptimal.

Class 13 (LT week 4): From Lectures 12-13

1. Is there a compliance puzzle? Why or why not? Discuss the relevant theory and empirical evidence.
2. Claim: “Developing countries should pursue production efficient tax policies to support economic growth.” True or False? Discuss the relevant theory and empirical evidence.

Class 14 (LT week5): From lecture 14

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 15 (LT week 6): From lecture 15

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 16 (LT week 7): From lecture 16

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 17 (LT week 8): From lecture 17

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 18 (LT week 9)

[Discuss extended essays]

Class 19 (LT week 10): From lectures 18,19

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 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?

Class 20 (LT week 11): From lectures 19, 20

1. Consider the empirical analysis in Edlin and Karaca-Mandic (2006).
 - a. Figure 2 shows a clear positive correlation between traffic density and insurance premiums. Discuss how this can shed light on the accident externality.
 - b. Your answer in a. assumes that an increase in traffic density causes insurance premiums to go up. Discuss potential confounds.
 - c. Consider the estimated external accident costs for different states in Table 5. Explain why these estimates are higher in for example California than in for instance North Dakota. What are the implications for the optimal tax?
2. Revisit the Baily model as covered in lecture (with no savings) when individuals perceive their probability to find a job as $\hat{\pi}(e)$ 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 $\hat{\pi}(e) - \pi(e)$.
 - 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?