Econ 131 Spring 2017 Emmanuel Saez

Problem Set 4

DUE DATE: April 26

Student Name:

Student ID:

GSI Name:

- You must submit your solutions using this template.
- Although you may work in groups, each student must submit individual sets of solutions. You must note the names other students that you worked with. Write their names here:

1. Essay

The new republican administration and congress have failed to repeal and replace Obamacare so far. This article discusses the threats to the functioning of Obamacare and what the states can do to overcome them if the federal government does not.

Article: 4 ways states can prevent the Affordable Care Act from "exploding"

If the Trump administration stops enforcing the individual mandate fine, how will this affect Obamacare? If the Trump administration stops enforcing the mandate on employers (with more than 50 employees) to provide health insurance, how will this affect Obamacare?

Suppose some states (such as California) choose to shore up Obamacare on their own as described in the article and others (such as Texas) do not. Would this be a good thing in light of the Tiebout theory of fiscal federalism?

2. True/False Statements

Determine whether each statement is true, false, or uncertain and explain why. Answers with no explanation will receive no points.

(a) The Tiebout Theorem holds for pure public goods.

(b) It is possible that graduating from UC Berkeley increases your adult earnings but that the things you learn at Berkeley (in class and from your peers) do not.

(c) Charter schools improve student outcomes.

(d) Suppose a local community is deciding how much to spend on private goods and local police. This community then receives a matching grant from a higher level government to incentivize spending on local police. Assuming well-shaped utility functions, police spending could increase or decrease depending on income effect and substitution effect.

(e) If moral hazard effects are large, then private insurance is preferable to social insurance.

(f) Responsible individuals would save optimally for retirement even absent any government interventions. Hence, no government retirement program is needed.

3. Workers Compensation

Consider an economy of identical individuals who earn a wage w while working and nothing when they don't. With probability p, the individuals get injured and cannot work. When injured, the individuals get a worker's compensation benefit of b from the government. When working, individuals pay a tax of tw to finance the workers compensation system. Assume that the agents have no other source of consumption in either state. Let $u(c) = \ln(c)$ denote the individual's utility from consuming c in a given state.

1. Write the government's budget constraint for an actuarially fair insurance program.

2. Write the individual's expected utility as a function of the benefit b.

Now suppose that p is a function of b. Assume that $\frac{dp}{db} > 0$ and $p(0) = \frac{1}{4}$. Explain the rationale for assuming that $\frac{dp}{db} > 0$.

3. Show analytically that the optimal benefit b^* is strictly greater than 0. Explain intuitively why neither a benefit of zero nor perfect insurance (equal consumption in both states) is optimal. Prof. Saez is evaluating the efficiency of the workers compensation system. He observes that injured workers' consumption rose by \$50 from 1996 to 1998, while the California government increased benefits by \$100 in 1997.

4. What does the model (from part 2) predict will happen to consumption of those who are injured when benefits are raised by \$100?

5. State two features of the real world that this simple model fails to incorporate which could cause its predictions to differ from the true effect.