Econ 230B

Spring 2021

FINAL EXAM: 2 Hours

You can use class notes, internet and computer resources but you cannot communicate with others (honors system)

Questions: 40 points

Answer briefly all 10 true/false questions (4 pts each). Explain your answer fully, since all the credit is based on the explanation. For the answers, base your answers on the substance of what was discussed in class (over and above what you can find in the slides).

1. Taxes cannot have a very large impact on labor supply of prime age workers because France has much higher taxes than the US and yet about the same work rate among prime age workers.

2. The efficiency costs of the EITC is increasing overtime as more and more individuals figure out how to game the EITC.

3. In the standard life cycle economic model, there is no need for a public retirement program like social security.

4. In the US, the elderly used to work more when there was no social security program. Therefore, the premise that people cannot work in old age and need retirement benefits is wrong.

5. Preferential tax systems for highly skilled foreign immigrants have a large positive effect on immigration and hence are desirable even if society cares about redistribution.

6. International tax competition generally leads countries to cut their corporate income tax rate below what would maximize welfare, and each country would benefit from a coordinated increase in corporate tax rates.

7. If people care about the bequests they leave to their children, then the optimal bequest tax rate is below the revenue-maximizing rate.

8. Corporate tax avoidance would disappear if the corporate income tax was integrated with the individual income tax (i.e., corporate taxes paid reduced dividend taxes owed at the shareholder level).

9. Third-party information reporting is the main determinant of tax compliance.

10. Standard economic models imply that capital taxes fully fall on labor.

PROBLEM (30 points):

The Biden administration proposed in April 2021 to increase the tax rate on realized capital gains from the current preferential tax rate of 20% to the normal top tax rate of 39.6% (for taxpayers with income above $1 million). This was also part of Biden's campaign platform. Let us assume that the likelihood that congress will pass such a bill and increase capital gains tax rates in 2022+ is 50%.

a (4 pts). Explain what behavioral responses in terms of realized capital gains we are likely to see in 2020 (the election year), 2021 (this year), and 2022 (the first year the new tax is implemented if the reform passes). For year 2022, explain the behavioral response that happens if the reform passes and separately if the reform fails to pass. Is there empirical evidence backing this up based on previous US tax changes?

b (3 pts). Let us denote by e the elasticity of realized capital gains with respect to the net-of-tax rate (one minus the marginal tax rate). This means that realized capital gains take the form $KG = KG_0 \cdot (1-\tau)^e$ where τ is the marginal tax rate and KG_0 the level of realized capital gains if there were no taxes at all on them. What is the tax rate τ^* that maximizes capital gains tax revenue $\tau \cdot KG$?

c. (3 pts) Government agencies scoring tax reform proposals assume that the elasticity e is equal to 2.5. Assume that the reform increases τ from $\tau_1 = 20\%$ to $\tau_2 = 39.6\%$. Does the reform raises capital gains tax revenue? Is the reform desirable in this narrow context?

d. (4 pts) Biden also proposed to tax unrealized capital gains at death (instead of the current system that provides a step-up of basis to inheritors free of tax and hence exempts from taxation all unrealized capital gains at death). Explain informally why such a reform could reduce the elasticity e. Suppose the elasticity is reduced down to $e = 1.5$. What is the new revenue maximizing tax rate and is the Biden reform desirable in this alternative context?

e. (4pts) The Biden administration proposal increases the tax rate on capital gains only on taxpayers with an income of $1 million or more. Let us assume (unrealistically) that the

$1 million threshold is based on income excluding realized capital gains and that such income is completely inelastic to taxes. Somebody with income (excluding capital gains) below $1 million pays a tax rate $\tau_1 = 20\%$ on all his or her capital gains while somebody with income (excluding capital gains) above $1 million pays a tax rate $\tau_2 = 39.6\%$ on all his or her capital gains. Explain how you could use this set-up to estimate the elasticity e using a Regression Discontinuity Design.

f. (4 pts) Let us assume again (unrealistically) that the $1 million threshold is based on income excluding realized capital gains but assume now that such income excluding realized capital gains responds to tax incentives. In this context, would the naive RD method from question e. lead to an overestimate or an underestimate of the true elasticity e of realized capital gains?

g. (4 pts) Explain whether you could overcome the problem in f. by doing a fuzzy RDD based on income excluding capital gains in year 2021 (the year before the reform kicks in).

h. (4 pts) How could you test compellingly whether you are in situation e. vs. situation f.?