

Public Finance Field Exam
January 2024

Directions: Answer both questions, in whatever order you prefer.

- I. One possible consequence of the U.S. budget impasse is an increase in tax revenues combined with a reform of the tax system. For each of the following proposals, discuss the effects on economic efficiency as well as tax incidence, both within and across generations. Assume that each proposal increases tax revenue on an annual basis.
- A. Under the individual income tax, the imposition of a limit on itemized deductions from income that caps each taxpayer's aggregate annual amount of such deductions at 10 percent of the taxpayer's adjusted gross income (AGI), which is a comprehensive measure of income before deductions, exemptions and tax credits. (For reference, it may be useful to know that in 2008, the most recent year for which data are available, itemized deductions amounted to 23 percent of AGI in the aggregate for taxpayers who claimed itemized deductions, and 14 percent for taxpayers with AGI over \$500,000, virtually all of whom faced the top marginal tax rate.)
 - B. Under the corporate income tax, a reduction in the generosity of deductions for depreciation and interest payments, combined with a small reduction in the corporate tax rate and an extension of the corporate income tax to large (as measured by assets) non-corporate enterprises that currently are not subject to it.
 - C. The introduction of a value added tax (VAT) combined with a uniform reduction in individual marginal income tax rates (that is, a reduction in each tax rate by the same number of percentage points).
 - D. A carbon tax assessed on energy usage at a rate based on the carbon content of energy inputs.
- II. Let us assume that there is a flat rate individual income tax of 25% in the economy. The government wants to increase expenditures on public goods and therefore adds a tax bracket of 35% for incomes above \$100,000. Before the reform, assume that there were 10 million individuals with income above \$100,000. These high income individuals reported on average \$300,000.
- A. With no behavioral response, how much extra tax revenue should the government collect with the tax increase (assuming for simplicity that there is no growth or inflation in the economy)? In general, government projections on tax collection changes due to tax changes assume no behavioral response of taxpayers. Why do you think this is the case?
 - B. Draw the budget sets before and after the reform and explain precisely how substitution and income effects in labor supply would affect incomes reported above \$100,000. Can the tax reform actually increase labor supply for some individuals?

- C. Suppose there are no income effects and that the tax reform raises only 50% of the projected increase in tax revenue from question A. Deduce from this what is the average elasticity of income with respect to one minus the marginal tax rate. Given this elasticity, what is the marginal tax rate t^* above \$100,000 that maximizes tax revenue?
- D. Suppose that government analysts in C. took into account only tax revenue from the individual income tax and failed to take into account the effect of the reform on revenue from other taxes such as the corporate income tax on corporate profits or the payroll tax on earnings. Relative to C., explain why including payroll tax revenue would further *reduce* tax revenue receipts from the reform and why including corporate income tax revenue would likely *increase* tax revenue receipts from the reform. Give an example supporting your reasoning from US tax reform evidence.
- E. The income tax reform of the Bush administration decreased the top marginal income tax rate from 39.6% in 2000 to 35% in 2003. The amount of taxes collected from the top 1% of incomes between 2002 and 2007 actually increased more than expected. Can we conclude from this that the elasticity of income with respect to one minus the marginal tax rate is large for high income earners? (Make sure to discuss the empirical studies using tax reforms when answering this question).