

Public Finance Field Exam
August 2025

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

1. Policy Reforms

For each of the following proposals, discuss their potential for increasing or decreasing social welfare relative to the current U.S. system. Incidence and efficiency should be part of that discussion. For this exam, social welfare equals the sum of individual utilities, which exhibit diminishing marginal utility of consumption. Reference findings from class (it's OK to describe a paper even if you don't remember the authors).

- a. Taxing pollution above its social marginal cost, in order to raise revenue that can be used to reduce other distortionary taxes.
- b. Transitioning from the current pay-as-you-go Social Security system to a system of funded defined-contribution pensions (where the tax dollars you pay during your working years are saved on your behalf in an individual account that is invested in private assets and which grow or fall in value according to market investment returns).
- c. Reducing the employer-assessed payroll tax (i.e., the portion of the payroll tax remitted by employers rather than employees) for older workers.
- d. A larger Earned Income Tax Credit for people residing in distressed urban and rural areas.
- e. Raising the GILTI rate from 10.5% to 15%. [Recall that the 2017 tax reform introduced the Global Intangible Low Tax Income provision (GILTI) that assesses a 10.5% immediate tax on the multinational's total foreign income in excess of 10% of the firm's total foreign tangible capital assets (e.g. factories, machinery, etc.). (E.g. If the firm has \$1000 of foreign tangible assets and earns \$500 in foreign income, it has to pay a 10.5% tax on \$400.) This tax liability is offset by a tax credit for 80% of foreign taxes paid on the income subject to the GILTI provision, meaning that such "GILTI income" is subject to some U.S. tax only if it is taxed abroad at an average rate below 13.125% (because $10.5 = 0.8 \times 13.125$).]
- f. A broad-based tariff on imported goods. (You may ignore exchange rate mechanisms as we did not cover that in this class.)
- g. Eliminating subsidies for people to buy health insurance on the Affordable Care Act ("Obamacare") health care exchanges.
- h. Annually auditing the efficiency of every local government's education spending and publishing the results.

2. Taxes and Labor Supply

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 which increases the marginal tax rate to 50% for pre-tax incomes above \$500,000. Before the reform, assume that there were 5 million individuals with income above \$500,000. These high-income individuals reported on average \$1,500,000.

- 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 nor inflation in the economy)?
- 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 \$500,000. Can the tax reform actually increase labor supply for some individuals?
- c. Suppose that there are no income effects and assume that the elasticity of reported income with respect to the one minus the marginal tax rate is equal to 1 and constant. What percentage of the expected tax revenue increases (computed in a.) will the government actually collect in this situation (approximately). What is the individual income tax rate in the top bracket (incomes over \$500,000) which would actually maximize government income tax revenue?
- d. Suppose that there is also a corporate income tax of 25% in the economy (before and after the reform). Suppose that the elasticity of individual income (described in c.) is entirely due to individuals shifting their individual income to the corporate sector (so that each dollar of individual reported income lost after the reform shows up as one extra dollar of corporate profits). How do your answers to c. change in that case?
- e. Suppose now that individuals have an option to migrate outside of the country. Suppose that individual incomes are not responsive at all to taxation for those who stay in the country (no income or substitution effects). Suppose that 10% of high-income earners (those with income above \$500,000) migrate out of the country following the tax reform. What percentage of the expected tax revenue increases (computed in b.) will the government actually collect in this situation (approximately).
- f. Would such a migration create fiscal externality effects abroad? Should there be coordination between countries when deciding about the level of top income tax rates? (discuss pros and cons).
- g. Suppose that after the reform, we observe bunching in the income distribution at \$500,000. Is such evidence consistent with scenarios a., c., d., or e.? Explain.