

Public Finance Field Exam
August 2016

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

1. Tax Reform

Many recent proposals for possible tax reform in the United States have involved some form of a trade-off in which marginal income tax rates are reduced and either the income tax base is broadened or a new tax is introduced. For each of the following hypothetical proposals, discuss the effects on economic efficiency as well as tax incidence, both within and across generations. Assume that each proposal is revenue-neutral on an annual basis.

- a. Under the individual income tax, a **proportional** reduction in marginal tax rates, combined with a limit on itemized deductions, capping each taxpayer's aggregate annual deductions at 10 percent of the taxpayer's adjusted gross income (AGI), which is a comprehensive measure of income before deductions. (For reference, in 2013, the most recent year for which data are available, (1) few lower-income individuals claimed itemized deductions, opting instead for the standard deduction, which is the same fixed dollar amount for all taxpayers; and (2) itemized deductions amounted to 20 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. Imposition of a "floor" for itemized deductions – allowing such deductions to the extent that they exceed 2 percent of AGI – combined with a proportional reduction in marginal income tax rates.
- c. Replacement of itemized deductions with a tax credit for a fraction x of deductible amounts, where x is chosen to have a revenue-neutral impact.
- d. Taxation of dividends as ordinary income, combined with a proportional reduction in marginal tax rates. (Dividends are currently subject to an alternative schedule with a maximum tax rate of 23.8 percent, whereas ordinary income, which includes wage and salary income, has a top marginal tax rate of 39.6 percent.)
- e. Introduction of a carbon tax based on the carbon content of energy inputs, combined with a proportional reduction in marginal income tax rates.

2. Education Finance Reform

There are many alternative ways to finance education. For each of the following proposals, discuss their potential for increasing or decreasing social welfare relative to the current typical (i.e. not Californian) U.S. system (you don't have to say how you would measure social welfare). For this exam, social welfare equals the sum of individual utilities, which exhibit diminishing marginal utility of consumption; it's up to you whether you consider the

sum of current adults' present discounted utilities (the default if you don't specify anything) or the sum of future adults' present discounted utilities (you may specify this in any given subsection). Also for this exam, the current typical U.S. system is one in which the local property tax funds a large share of local public pre-college schools, in which a marginal increase in local property taxes substantially increases local public school spending, and where states fund a large share of public college education via state sales and income taxes. Assume that each proposal is revenue-neutral on an annual basis. Reference at least one paper or exercise from 230B in every answer (a)-(g) [if you don't remember the author, just describe the content in a few words like "the recent paper on Danish pension subsidies"]. There are eight parts to this problem so keep your answers relatively short, reference previous parts' answers when possible, and overall pay attention to the clock.

- a. The Republican Party's presidential nominee Donald Trump said in his speech at the Republican National Convention "We will rescue kids from failing schools by helping their parents send them to a safe school of their choice." Let's assume that the proposal is to give parents a voucher with a value equal to their locale's annual per-student spending, and the parents can then spend that amount at any local public school or any private school they wish to send their child that year. If they send the child to a local public school, they don't pay anything out of pocket. If they send the child to a private school whose tuition is larger than the voucher amount, the parents have to pay the difference out-of-pocket.
- b. Trump also said "I know that corruption has reached a level like never before." Let's assume the proposal is to audit the efficiency of every local government's education spending and to publish the results.
- c. The Libertarian Party's presidential candidate Gary Johnson is running on a platform that can be construed as proposing to dramatically increase the number of school districts in the United States by breaking up all large and moderate-sized school districts into smaller districts.
- d. The Democratic Party's presidential nominee Hillary Clinton's platform says that if she is elected President, "Every student should have the option to graduate from a public college or university in their state without taking on any student debt." and "All community colleges will offer free tuition." (Suppose these changes are financed via a federal income tax increase, proportionally across all taxes.)
- e. Clinton's platform also calls for federally funded investments in pre-college schools located in poor areas. Let's suppose that she's currently deciding between giving poor areas' local governments an unrestricted annual grant based on the number of local school-age children OR subsidizing local education spending (the federal government contributes gives \$ s to the local government with $s > 0$ for every \$1 that the local government spends on pre-college schooling). Discuss both policies.
- f. Suppose that one of proposals from (e) gets implemented in 2017 and you have access to all cross sectional datasets (with data through 2018) that have been used in previous

empirical papers. What is one good research design for estimating economic consequences of the program?

- g. Now suppose you have administrative longitudinal (person-level panel) data through 2040 where you can track every U.S. individual over time and space and measure outcomes of interest. What is one good research design for estimating economic consequences of the program from (f)?
- h. November 8 arrives and, amazingly, the American people overwhelmingly elect you as a write-in candidate. Now you're President, and Congress will support one education finance policy of your choice. You care only about maximizing social welfare. Which of the above policies would you implement and (in one sentence) why do you think that policy would increase social welfare the most?