

## Public Finance Field Exam, January 2021

**Directions:** Answer all questions, in whatever order you prefer.

### 1. Tax Reform

The Tax Cuts and Jobs Act of 2017 (TCJA) was the most substantial change to the U.S. income tax code in decades. Answer the following questions. Answers to some questions may be more succinct than others.

- (1) TCJA reduced the U.S. corporate tax rate from 35% to 21%. For U.S.-based multinational corporations, TCJA instituted a provision called 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  $10.5 = 0.8 * 13.125$ ). The multinational pays no additional taxes when the foreign profits are repatriated, whereas under previous law repatriated profits were taxed, with a tax credit up to the U.S. 35% tax rate for foreign taxes paid on these repatriated profits. Discuss the effects of these provisions on a U.S.-based multinational's decision on where to locate its factories and where to try to log its profits (e.g. by transfer pricing), relative to what was in force in 2017. Discuss the same for a German-based multinational's decision on where to locate its factories.
- (2) For high-income owners of pass-through businesses, TCJA makes the marginal tax rate on pass-through business income 30%. Let's suppose that C-corporations are now tax-privileged relative to pass-throughs. Let's suppose that all manufacturing firms are C-corporations and that all service firms are pass-throughs. Evaluate the incidence this differential tax treatment, relative to a world in which there is no business income taxation. Assume enforcement is perfect, as in the Harberger model. Adopt Harberger model assumptions in your evaluation. Then also discuss the potential impact of real-world deviations from the Harberger assumptions.
- (3) TCJA provides for favorable capital gains tax treatment on investments in "Opportunity Zones": specifically designated low-income neighborhoods. Under what conditions will OZ landowners benefit, and under what conditions will the residents of OZs benefit? What does the evidence on Empowerment Zones suggest about the likely incidence of OZs? Can it make sense to use empowerment/opportunity zones for redistribution, given the government's ability to adjust the progressive income tax instead? Why or why not?

### 2. Universal Basic Income (UBI)

Universal Basic Income (UBI) proposals are getting a lot of attention in the U.S. and other high-income countries. A wide range of proponents, from Charles Murray to Andy Stern

(former president of the Service Employees International Union), have backed the idea. A pure UBI provides a guaranteed cash benefit to each adult and the benefit is not phased out. Answer the following questions. Answers to some questions may be more succinct than others.

- (1) Compare a UBI to two other types transfer programs provided by most advanced countries: cash welfare (e.g. AFDC in the U.S.) and in-work benefits (e.g. EITC in the U.S.). Your answer should cover predictions for labor supply, poverty, and government costs.
- (2) Discuss the distributional implications of a UBI. To answer this, consider two alternative funding scenarios: (a) eliminating the existing social safety net and replacing it with the UBI (Murray proposal) and (b) funding the UBI with new taxes.
- (3) One argument raised by UBI proponents is that the program will have less stigma than existing transfer programs. Discuss why or why not this would be the case.
- (4) There are several pilot UBIs in development. What could we learn from the pilots in terms of the effects of a UBI that we could not already predict based on the existing research?

### **3. Energy Conservation and Greenhouse Gas Emissions**

Over the years, the United States, other countries, and some US states have either introduced or considered a variety of policies with at least one aim being to influence the level of emissions of “greenhouse” gases, i.e., gases which contribute to global temperature increases in proportion to their carbon content. Discuss the effects of each of the following policies, in terms of their effectiveness at limiting global emissions efficiently and their distributional consequences:

- (1) A US carbon tax, set at a constant rate per ton of carbon on all emissions within the United States, with revenues used to fund general government activities;
- (2) A US carbon tax, as in (1), but applied only to final consumer uses, such as tailpipe emissions of household vehicles, but not industrial uses, such as emissions by manufacturers and electricity producers;
- (3) As proposed recently by an influential group of former government policy advisors known as the “Climate Leadership Council,” a US carbon tax, as in (1), but with (a) the full carbon tax phased in over time; (b) revenues rebated uniformly to households; and (c) carbon tax rebates to producers for goods exported to countries without a carbon tax, and carbon tax imposed on imports from such countries;
- (4) A California cap and trade system, as actually imposed under AB32 (the Global Warming Solutions Act of 2006) and very recently extended, which gives away most permits to the California producers governed by the system;

- (5) A US “alternative fuels” requirement, mandating each electricity generator to produce a certain fraction of its electricity using fuel with no carbon content, such as solar or wind power;
- (6) A US subsidy for the use of hybrid (gasoline and electric) or all-electric automobiles;
- (7) A worldwide carbon tax, set at the same rate across countries, with revenues kept by the nations where the taxes are paid; and
- (8) A worldwide carbon tax, as in (7), but with varying international rates set so that each nation achieves the same level of carbon emissions per capita.

#### **4. Taxing Wealth and Income from the Wealthy**

- (1) Suppose you are the Treasury Secretary in charge of designing the best possible enforcement for a wealth tax on billionaires. List and discuss the most important 3 items to be thinking about.
- (2) Suppose you are the Treasury Secretary in charge of designing the best possible reform to the capital gains tax in order to raise more revenue. List and discuss the most important 3 items to be thinking about.