

Econ 131
Spring 2022
Emmanuel Saez

Problem Set 2

DUE DATE: March 30

Student Name:

Student ID:

GSI Name:

- **You must submit your solutions using this template.**
- **Although you may work in groups**, each student must submit individual sets of solutions. You must note the names other students that you worked with. Write their names here:

1. Essay

Read the following recent blog post discussing the need for a welfare state. Write a short essay [the essay has to fit in the page below] about the post. The post argues that the welfare state should simply support non-workers (children, elderly, disabled) regardless of means. In contrast, the US welfare state is heavily means-tested (i.e., is targeted to families and households with low income). Discuss the pros and cons of each approach.

Post link:

<https://www.peoplespolicyproject.org/2022/02/18/why-we-need-the-welfare-state/>

(c) If the US adopts the new global 15% minimum tax on multinational corporations, US multinational corporations like Apple or Google will have no incentives to shift profits to tax havens anymore.

(d) Inheritances taxes are desirable if people's motive for accumulating wealth is not about leaving bequests to their children.

(e) Evidence from the Israeli Kibbutz implies that redistribution does not hurt people's incentives to work.

(f) If wealth comes primarily from life-cycle savings, there should be no tax on capital income.

3. Capital Income and Savings Taxation

Consider a 2 period model where individuals earn labor income $Y = 100$ from working in period 1 and do not work in period 2 (retirement). Individuals choose how much to consume in each period. Savings in period 1 earn an interest rate $r = 50\%$. Let C_1 denote consumption in period 1 and C_2 denote consumption in period 2. Suppose that individuals have a utility function $U = \ln C_1 + \ln C_2$.

- (a) Set up the individual's lifetime utility maximization problem and solve for the optimal C_1 , C_2 , and S in an economy without taxes.

Now assume that a comprehensive income tax $\tau = 10\%$ is imposed on both labor and savings income.

(b) Find the optimal C_1 , C_2 , and S .

(c) Compare the ratio of consumption C_2/C_1 in (a) and (b). Does the comprehensive income tax distort consumption choices?

(d) How much revenue does the government collect from each individual under the comprehensive income tax system?

Suppose now that the government is considering switching to a system where only the labor income is taxed.

(e) Find the labor income tax τ_L that would raise as much revenue as is collected under the comprehensive income tax system.

(f) Find the optimal C_1 , C_2 , and S .

(g) Compare the ratio of consumption C_2/C_1 in (a) and (f). Does the Labor income tax distort consumption choices?

Consider now that individuals have the opportunity of shifting half of their labor income into savings income.

(h) How much revenue would be collected from each individual under the labor income taxation system?

(i) Under this scenario which tax system would collect more revenue? Explain.