

Public Policy 290 – Introduction to Tax Policy

Progressive income, wealth, and inheritance taxation: the ideal triptych?

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Roadmap

- Optimal income taxation
- Optimal estate/inheritance taxation
- Optimal wealth taxatoin

1 Optimal income taxation

1.1 The equity-efficiency trade-off

When the government taxes labor income, this has two effects

- Generates tax revenue: mechanical (positive) revenue effect
- Workers respond by reducing labor supply: behavioral (negative) revenue effect

The optimal labor income tax problem in its general form

Goal of gov. is to balance the equity gains with the efficiency losses

- Objective: A social welfare function (SWF), $W = W(U_1, \dots, U_n)$, where U_i is the utility of individual i .
- Instrument: A tax function $T(z)$ that gives the amount of taxes owed by individual with earnings z
- Constraints: gov. budget constraint and indiv. optimizing behavior
- The problem: Design $T(\cdot)$ to maximize SWF subject to the

government budget constraint and individual optimization

- This problem was first solved by Mirrlees (1971). In its general form, it is difficult to solve.
- We will simplify the problem by:
 1. Simplifying the tax system: piecewise linear taxes
 2. Considering a special social welfare function

Simplification number one: linear income tax

- The simplest tax system is one with a constant marginal tax rate τ

$$T(z) = \tau \cdot z \quad (1)$$

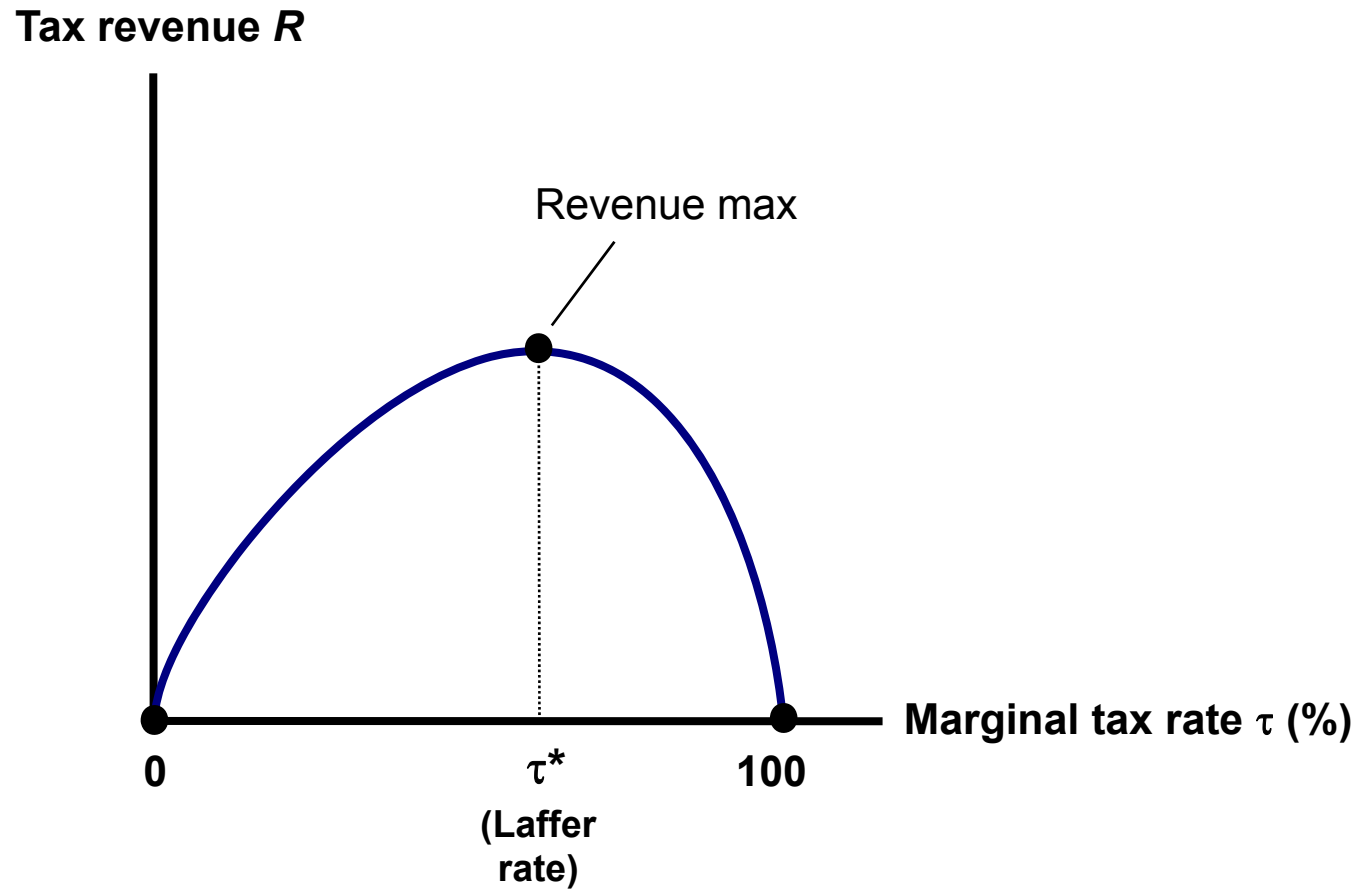
- Also known as a **flat tax**

Simplification number two: Rawlsian SWF

- The Rawlsian SWF is $W = \min(U_1, \dots, U_n)$: gov. only cares about the worst-off individual in the population

- Assume that the worst-off individual in the population is not able to work, and government redistributes all revenue as a lump-sum G
- A Rawlsian government then wants to maximize $G \Rightarrow$ the optimal income tax τ maximizes revenue \Rightarrow reach top of the **Laffer curve**.

THE LAFFER CURVE



1.2 The optimal labor income tax rate

Laffer rate under linear taxation

- Theorem: the Laffer rate is given by $\tau^* = \frac{1}{1+\varepsilon}$
- where $\varepsilon \equiv \frac{dz/z}{d(1-\tau)/(1-\tau)}$ is the the elasticity of taxable income
- With $\varepsilon \approx 0.2$ then $\tau^* \approx 83\%$

Piecewise linear tax systems

- Most tax systems are not linear, but piecewise linear: impose different marginal tax rates over different income intervals
- Within each bracket, the marginal tax rate is constant. Across brackets, marginal tax rates differ and typically increase with income
- Let's focus on the Laffer rate in the highest-income tax bracket, assuming that income is Pareto-distributed at the top

- Variables pertaining to top-rate taxpayers are denoted by “hat”
- Theorem: the high-income Laffer rate is given by

$$\hat{\tau}^* = \frac{1}{1 + \hat{\varepsilon} \cdot a}$$

- where $\hat{\varepsilon}$ is the elasticity of taxable income at the top
- And $a =$ Pareto coefficient (indicator of inequality)

- The more unequal the distribution of income, the higher the optimal top marginal income tax rate
- The higher the elasticity of taxable income, the lower the optimal top marginal income tax rate
- Plugging real number in the formula:
- If $a \approx 2$ and $\hat{\epsilon} \approx 0.2$ then $\hat{\tau}^* \approx 75\%$
- Corresponding optimal average rate for the top 1% around 60%

1.3 Taxing capital income

Why tax capital income and not only labor income?

Fuzzy frontier between capital and labor:

- Business owners can decide how much they get paid in wages vs. dividends
- Freelancers (journalists, consultants...) and self-employed (doctors, lawyers, etc.) can incorporate

Vast empirical evidence on how differential tax treatment can induce shifting:

- Finnish dual income tax system: taxes separately K income at preferred rates since 1993 → people report more K income
- Carried interest in the US for hedge fund and private equity fund managers → people report capital gains instead of wages

The higher the shifting elasticity, the closer the tax rates on labor and capital income should be

- Extreme case where government cannot distinguish at all between

labor and capital income

- Govt observes only $wl + rK \Rightarrow$ Only option is to have identical marginal tax rates on labor and capital
- In practice, this seems to be an important consideration when designing income tax systems, especially for top incomes

2 Optimal inheritance taxation

2.1 Meritocratic arguments

- Most normative theories of distributive justice put a strong emphasis on individual merit → tax bequests
- But individuals value the possibility of leaving a bequest to their children → don't tax bequests

→ Interesting trade-off

Simplified optimal inheritance tax model:

- Meritocratic Rawlsian criterion: maximize welfare of those receiving no inheritances
- **Optimal inheritance tax rate:**

$$\tau_B = \frac{1 - \bar{b}}{1 + e_B}$$

with e_B = elasticity of aggregate bequests and \bar{b} = relative bequest left by zero-bequest receivers

Key insights:

- Optimal $\tau_B < 1/(1 + e_B)$ revenue maximizing rate because zero-receivers care about bequests they leave
- $\tau_B = 0$ if $\bar{b} = 1$ (i.e, zero-receivers leave as much bequest as average)
- If bequests are quantitatively important, highly concentrated, and low wealth mobility then $\bar{b} \ll 1 \rightarrow$ high τ_B

3 Optimal wealth taxation

The proper way to tax billionaire: a wealth tax?

Income flow can be difficult to observe for top wealth holders:

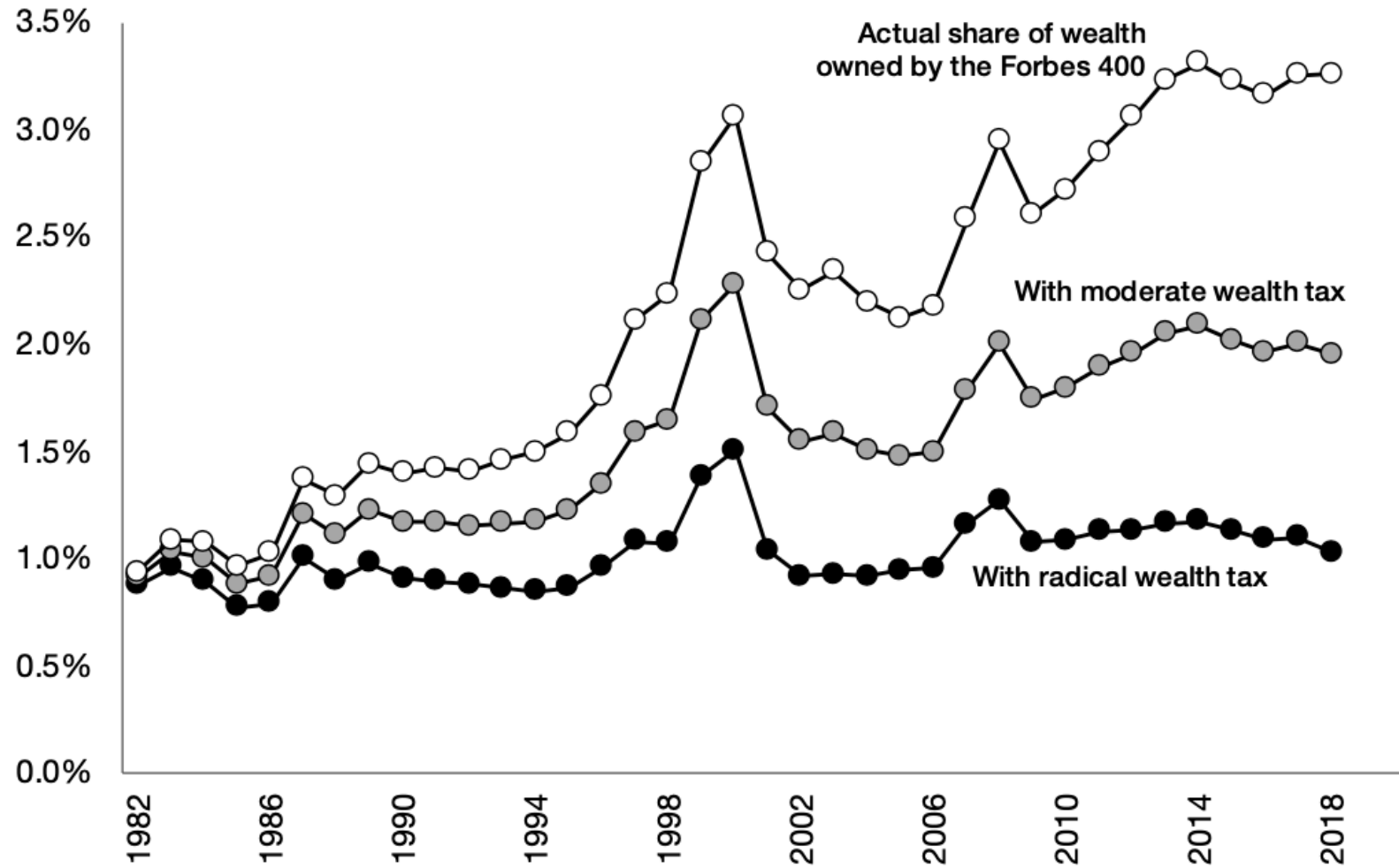
- Capital income retained in holding companies, trusts, etc., can create large gap between economic and taxable income
- On the contrary W_{ti} is usually well defined

About 70% of the wealth at the very top is in assets with clear market values

When clear market values are not observable, they can be created

- Allow business owners to pay in kind
- Government re-sells share on a market

(Share of wealth owned by the Forbes 400:
actual versus with wealth taxation since 1982)



References

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