Introduction

The elasticity of the Pareto parameter and top income optimal tax rates

The goal of this paper is to find the top income optimal tax rates. It consists of three parts: refining Saez's formula for top income optimal tax rates, showing that "the elasticity of the Pareto parameter is a sufficient statistic for changes in the top tax base", and "empirically estimating the elasticity of the Pareto parameter for top . . . income groups."

First, it provides some examples to demonstrate the deficiency of behavioral response in Saez's formula. Some effects are not measured by the behavioral response since this response only tracks the income changes of those in the rich club. It then introduces the idea of the mobile response. The mobile response tracks the changes of sum of income greater than threshold, which can also capture the mobility between rich club and others. It "generalizes Saez's behavioral response by accounting for the 'extensive' as well as 'intensive' income mobility in the rich club".

Simultaneously, it indicates that the aggregate elasticity needs to be adjusted by Pareto parameter to measure the mobile response. However, there are many empirical value of Pareto parameter which can be chosen. Alternatively, it defines the elasticity of Pareto parameter and shows that "the elasticity of Pareto parameter is a sufficient statistic for changes in the top tax base".

Finally, it empirically estimates using the ideas introduced above. It estimates the elasticity of Pareto parameter and uses the estimated elasticity to calculate the top income optimal tax rates. Its results range from 49% to 66% which are less than those in Saez's (Yang, 2015).

Notations:

$\bar{z}$ a threshold of earnings above which the top rate applies
z_m the mean of incomes above $\bar{z}$
α Pareto parameter
T tax base of the top income
τ top tax rate
M mechanical effect
D mobile response
e aggregate elasticity of taxable income in the top bracket
ς elasticity of the top tax base
u_z the utility of an agent with taxable income z
S the welfare of all agents in the top tax bucket
W welfare effect