

TAX-BUNCHING, INCOME SWITCHING AND SELF-EMPLOYMENT

DANIEL LE MAIRE (EPRU) AND BERTEL SCHJERNING (EPRU)

1. PROJECT DESCRIPTION

Since Feldstein (1995, 1999) the behavioral response of taxable income to changes in marginal tax rates has been seen the central parameter in the formulation of tax and transfer policies. A large empirical literature has therefore focused on estimating the taxable income elasticity and many different methods have been suggested (see Saez et al. (2010) for a critical review). In a recent contribution to this literature, Saez (2010) shows that the compensated elasticity of reported taxable income can be estimated directly from the amount of bunching around the tax cutoffs.

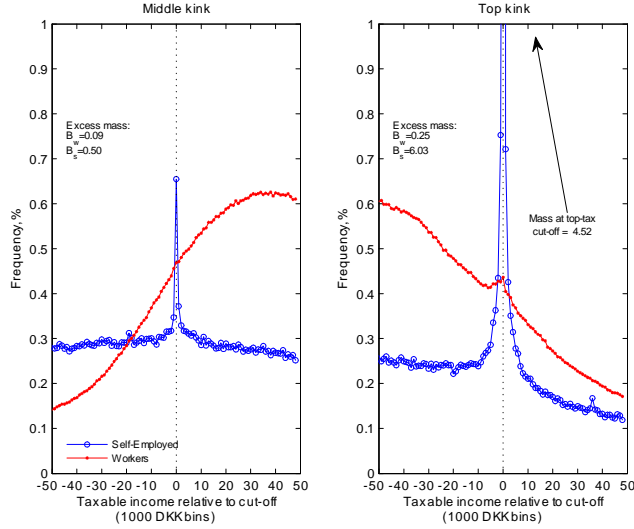
Saez (2010) method has recently been used in Saez (2010), Kleven et al. (2010) and Chetty et al. (2010) and one common finding is that the largest excess mass and, thereby, the highest elasticity is found for individuals with self-employment income, whereas the bunching for workers is much less pronounced. The figure below shows clear evidence of bunching in taxable income at both the middle tax and top tax cutoffs for self-employed. In fact, using the method developed by Saez (2010) the excess mass of 4.5 percent at the top-tax cutoff translates into an elasticity of 0.49. In contrast the excess mass of wage-workers is 0.25 which corresponds to a near zero elasticity.

In this project we investigate sources that drive the massive amount of bunching for the self-employed. Specifically we ask whether we can interpret the pronounced bunching in *taxable* income for the self-employed as a real behavioral response in *earned* income or whether bunching for the self-employed is primarily driven by income switching and reporting effects?

When analyzing the intertemporal tax planning behavior of Danish self-employed individuals it is important to take into account that self-employed can use the firm tax scheme or the capital returns scheme to retain earnings in the firm and, thereby, smooth variations in earnings across years - in part to reduce tax liability. These special tax schemes enable self-employed to locate themselves exactly at the kinks of the tax system - without adjusting their efforts to earn profits.

We propose a simple theoretical model which extends the standard static model of consumption and labor supply under progressive income taxation, by allowing self-employed to

FIGURE 1. Distribution of Taxable Income, Centered Around Kink



Notes: These figures plot the empirical distribution of taxable income for individuals with wage-work (red curve) and self-employed (blue curve) as primary occupation. Taxable income is centered relative to the middle tax cutoff (left panel) and the middle tax cutoff (right panel). Taxable income (horizontal axis) is divided into small 1000 DKK bins. A symbol is plotted at each midpoint. Each point shows the percentage frequency of individuals with taxable income in a given 1000 DKK bin.

use retained earnings to legally transfer firm profits across years. The possibility of using retained earnings is particularly important for self-employed facing progressive taxes, since self-employment incomes fluctuate much more over time than incomes from wage employment. This income volatility implies that self-employed in absence of the ability to use retained earnings would be punished by a progressive income tax system. To capture that part of the income fluctuations are independent of efforts, we model this by including a time-varying and exogenous income component.

We will use the theoretical model to motivate our empirical estimations and examine the model's predictions using a 100 per cent sample with Danish individual tax register information from 1994 to 2001. We will both use Saez (2010) estimation method on different subsamples to uncover whether the high elasticity of 0.49 is overvalued. Furthermore, we will exploit the panel nature of the data set and use the variation in tax rates during the period 1994-2001 to estimate the elasticity of a change in the marginal tax rate. This will both be accomplished in a Gruber and Saez (2002) estimation framework and by considering the effect of the abolition of the 6 percent tax in 1996 on the mass of self-employed bunching at the 6 percent tax cutoff in 1994 and 1995.

Obtaining reliable elasticity estimates is central for tax policy and, hence, the suggested project is highly policy relevant. Furthermore, it is often argued that self-employment and entrepreneurship play an important role in the modern economy as a creator of innovations

and growth. Nevertheless, the intertemporal tax planning behavior of self-employed is not well-understood. Hence, it is for a policy perspective also relevant to examine to which extent and how self-employed use retained earnings in order to assess whether the firm tax scheme and capital returns scheme constitute an appropriate design for taxing the self-employed.

2. OUTPUT AND TIMELINE

The project will yield an academic paper co-authored by Daniel le Maire and Bertel Schjerning. The paper will be targeted to a leading field journal in public economics. A first draft of the paper will be completed during the spring of 2011 and sent out as working paper at latest during the summer of 2011. Journal submission will happen in the autumn of 2011.

3. BUDGET

We apply for 212,561 DKK to cover wage buy-out for Daniel le Maire and Bertel Schjerning.

Salary	2 months salary, Daniel le Maire	88,567
	2 months salary, Bertel Schjerning	88,567
Overhead (20%)		35,427
Total		212,561

REFERENCES

- CHETTY, R., J. FRIEDMAN, T. OLSEN, AND L. PISTAFERRI (2010): "Adjustment Costs, Firm Responses, and Labor Supply Elasticities: Evidence from Danish Tax Records," *forthcoming: Quarterly Journal of Economics*.
- FELDSTEIN, M. (1995): "The effect of marginal tax rates on taxable income: A panel study of the 1986 Tax Reform Act," *The Journal of Political Economy*, 103(3), 551–572.
- (1999): "Tax avoidance and the deadweight loss of the income tax," *Review of Economics and Statistics*, 81(4), 674–680.
- GRUBER, J., AND E. SAEZ (2002): "The elasticity of taxable income: evidence and implications," *Journal of Public Economics*, 84(1), 1–32.
- KLEVEN, H. J., M. KNUDSEN, C. T. KREINER, S. PEDERSEN, AND E. SAEZ (2010): "Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark," *forthcoming: Econometrica*.
- SAEZ, E. (2010): "Do taxpayers bunch at kink points?," *American Economic Journal: Economic Policy*, 2(3), 180–212.
- SAEZ, E., J. SLEMROD, AND S. GIERTZ (2010): "The elasticity of taxable income with respect to marginal tax rates: A critical review," *forthcoming: Journal of Economic Literature*.