

# The Finnish Top 0.4 Percent: An Exploration of Top Tax Shares in Finland from 2009 to 2013

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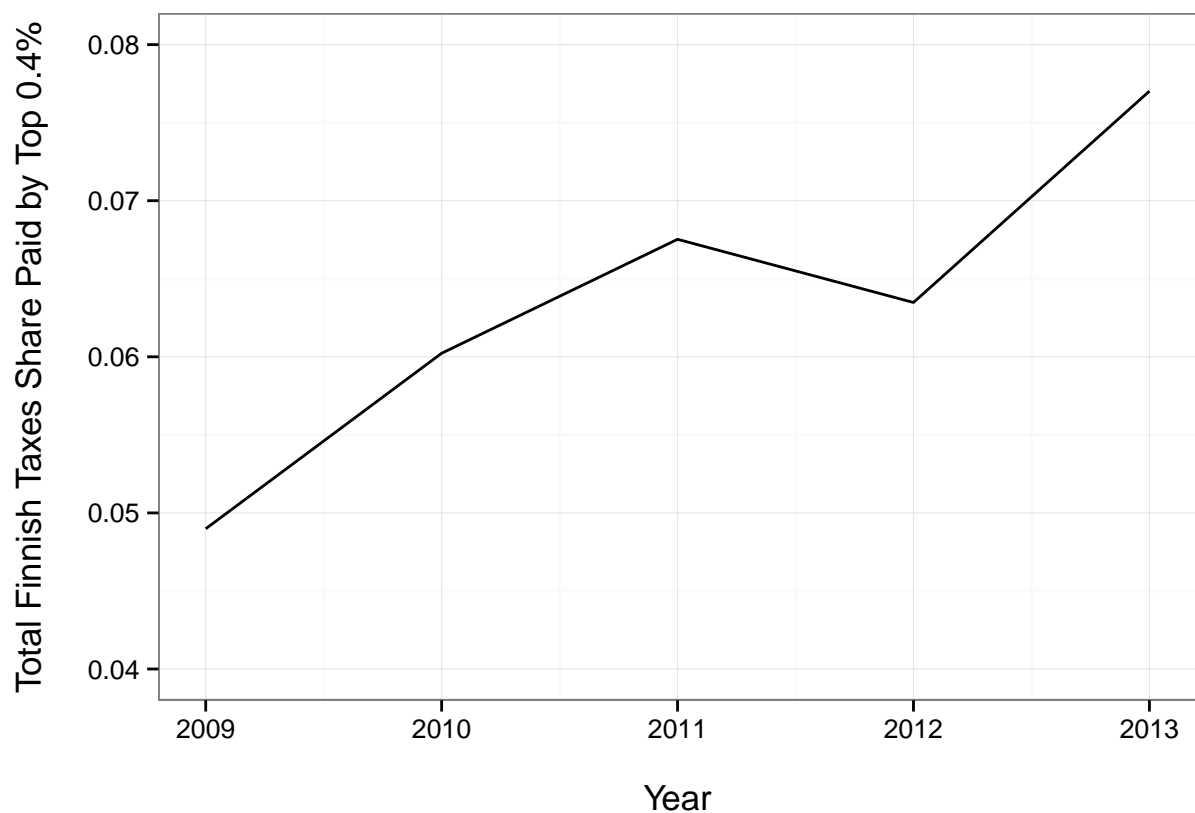
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# 1 Introduction

The question about an “optimal” income taxation is always discussed against the background of classic economic theories: Income taxation should maximize a given social welfare function that depicts a societies preference for equality. Furthermore, sacrifice theory of income taxation illustrates that redistribution should take place up to the point where marginal utilities are equalized. However, these theories completely neglect *behavioral responses* to taxation. According to the Laffer-Curve, there comes a point where a further increase of the tax rate would result in a loss in tax revenues due to negative labor supply responses. In a relatively recent work, Saez (2004) identifies additional reasons why trends in top-income shares are correlated with the tax rates: labor supply decisions, evasion/avoidance responses and bargaining responses. Indeed, the rationale of disruptive changes in income taxation schemes, like heavy reductions in marginal income tax rates in the US of the 1980’s was the logic of almost exclusively the supply side economics: Lower tax rates were believed to trigger important increases in economic activities and therefore higher tax revenues. It is against this background that many researchers focused their analysis only on behavioral responses like labor supply, savings and retirement. The current research frontier challenges this intellectual weight on supply side economics and steps beyond those “conventional” behavioral responses. Saez (2004) states that the discovered behavioral responses, such as tax deductible activities, compensation (e.g. wage versus untaxed fringe), unmeasured efforts, career choices, saving decisions and/or compliances, have “substantial effects on economic activity of high-income earners” (2004). Eventually, these determinants of reported incomes lead to more elastic responses with respect to taxation than assumed initially (Piketty and Saez 2014). According to Giertz (2007) this effect is driven mainly by high income earners: analyzing US tax reforms of the 1980’s provides strong evidence that especially highly paid employers were able to retime (i.e. temporally shift) their compensation, taking advantage of the tax reforms. Moreover, and apparently also related to the behavior of the top tail of the income distribution, the timing of capital gains realizations seems to be highly sensitive to changes in the capital gains tax rates (Auerbach and Poterba 1988). Finally, tax cuts in the top individual taxation to below the corporate tax rate triggered a massive shift of corporate income towards the individual income sector (legal entities that are only taxed at the individual level) (Auerbach and Slemrod 1997). All in all, the data strongly suggests that taxpayers with high incomes are much more responsive to changes than individuals in the middle class.

Share Plot Goes Below



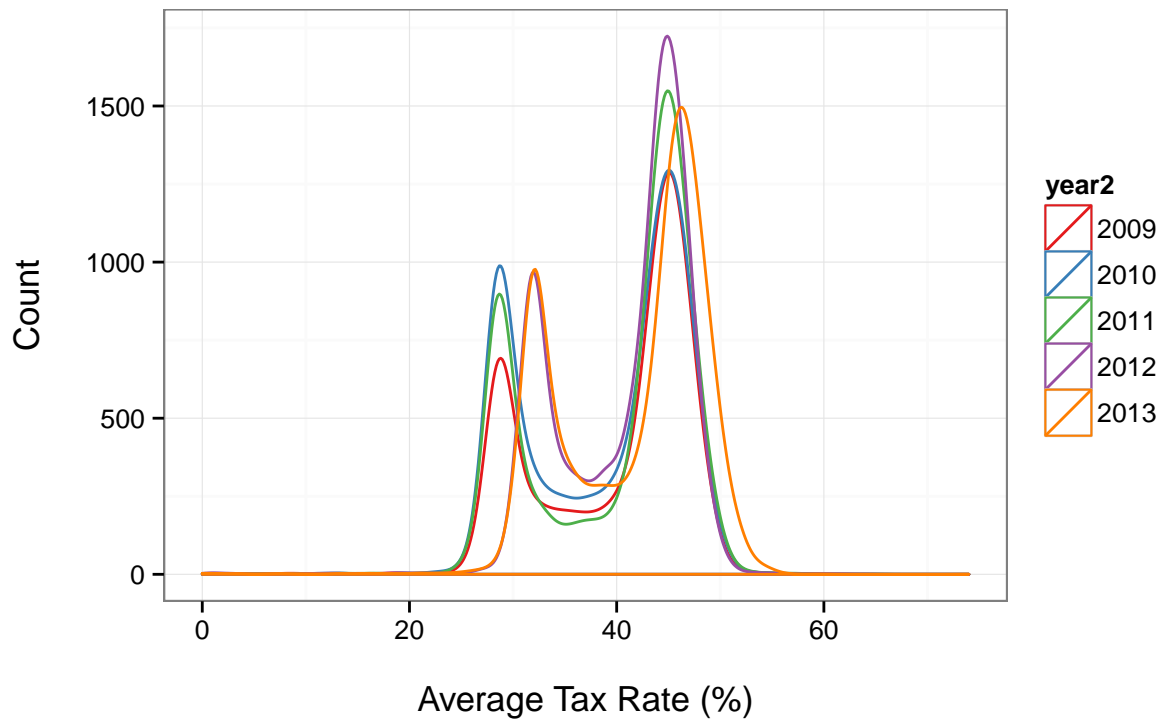
## 2 Literature Review

## 3 Dataset

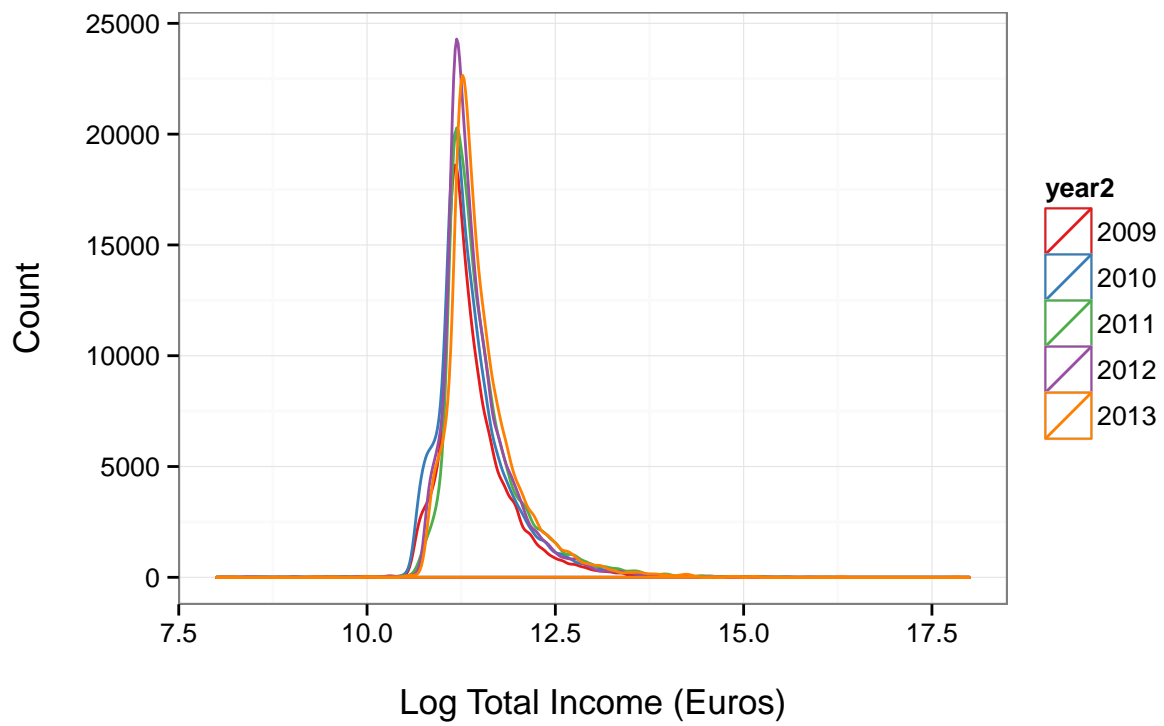
Summary Stats Table

Year	N	Ave Inc (E)	Med Inc (E)	Ave Paid (E)	Med Paid (E)	Mean Tax (%)	Med Tax (%)
2009	12134	283245	199020	106996	80653	40	43
2010	14290	305270	201964	111710	80336	39	42
2011	13978	350746	219372	128043	87256	40	44
2012	15000	285234	202520	112169	83368	41	43
2013	15000	347759	213323	136092	89515	42	44
All	70402	315287	207456	119433	84494	40	43

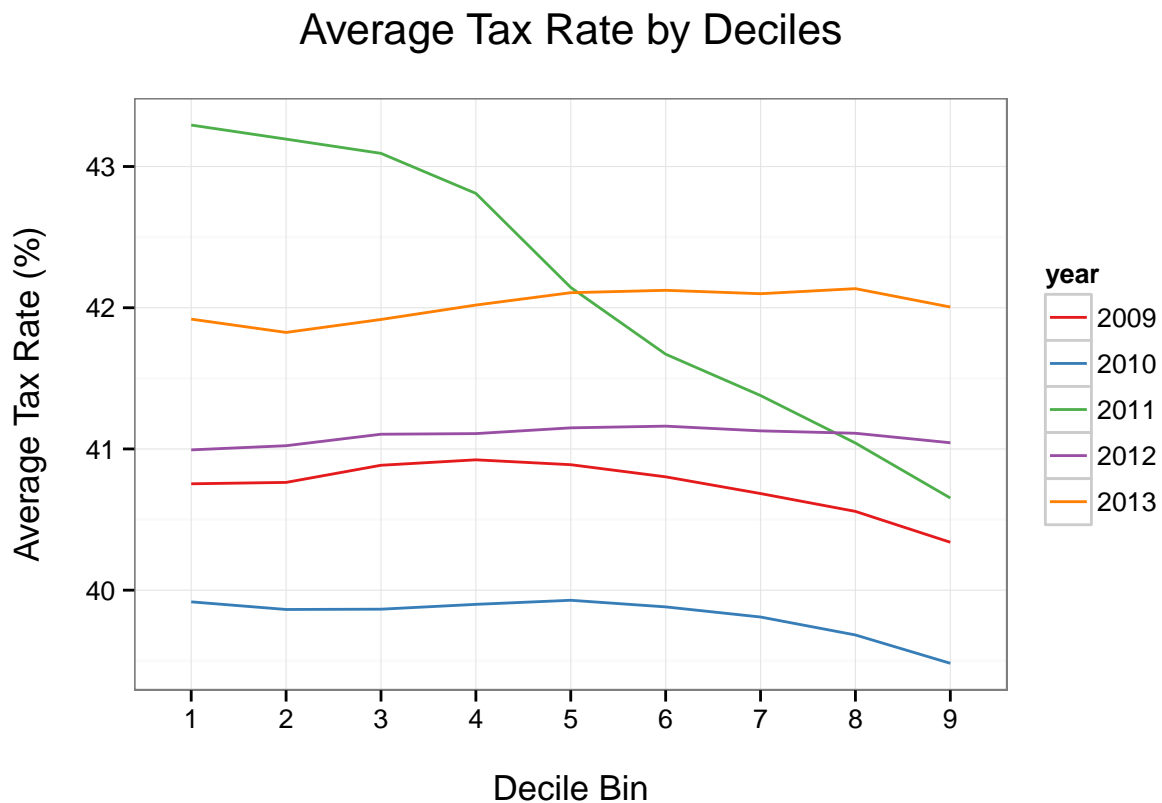
Observation Counts of Average Tax Rate by Year



Observation Count of Log Total Income by Year



Average Tax Rate in Decile Means Plot



## 4 Methodology

## 5 Results

Time Series Results

Panel Result

Why does the summary show up?

## 6 Discussion

## 7 Conclusion

## References

- Auerbach, Alan J, and James Poterba. 1988. "Capital Gains Taxation in the United States: Realizations, Revenue, and Rhetoric." *Brookings Papers on Economic Activity*. JSTOR, 595–637.
- Auerbach, Alan J, and Joel Slemrod. 1997. "The Economic Effects of the Tax Reform Act of 1986." *Journal of Economic Literature*. JSTOR, 589–632.

Table 1: Time Series Elasticities

	<i>Dependent variable:</i>	
	Log of Average Taxable Income	
	Without Time Trend	With Time Trend
	(1)	(2)
Elasticity	−0.035*** (0.003)	0.009*** (0.003)
Time Trend		0.033*** (0.0002)
Constant	12.639*** (0.002)	−53.855*** (0.440)
Observations	70,402	70,402
R <sup>2</sup>	0.002	0.247
Adjusted R <sup>2</sup>	0.002	0.246
Residual Std. Error	0.093 (df = 70400)	0.081 (df = 70399)
F Statistic	133.426*** (df = 1; 70400)	11,516.240*** (df = 2; 70399)
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01

Table 2: Panel Elasticities

	<i>Dependent variable:</i>	
	Log of Average Taxable Income	
	<i>OLS</i>	<i>panel linear</i>
	(1)	(2)
Elasticity	0.105*** (0.033)	0.640*** (0.131)
Constant	0.016 (0.018)	
Observations	14,580	14,580
R <sup>2</sup>	0.001	0.002
Adjusted R <sup>2</sup>	0.001	0.002
Residual Std. Error	0.449 (df = 14578)	
F Statistic	10.172*** (df = 1; 14578)	23.788*** (df = 1; 9718)
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01

Giertz, Seth H. 2007. “The Elasticity of Taxable Income over the 1980s and 1990s.” *National Tax Journal*. JSTOR, 743–68.

Piketty, Thomas, and Emmanuel Saez. 2014. “Inequality in the Long Run.” *Science* 344 (6186). sciencemag.org: 838–43.

Saez, Emmanuel. 2004. “Reported Incomes and Marginal Tax Rates, 1960-2000: evidence and Policy Implications.” In *Tax Policy and the Economy, Volume 18*, 117–74. MIT Press.