

The Elasticity of Corporate Taxable Income: New Evidence from UK Tax Records

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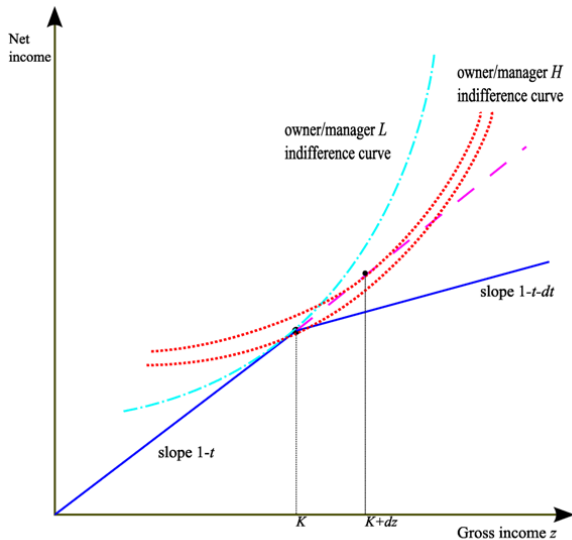
Motivation

- Considerable body of empirical research on effects of corporation tax on corporate behavior
 - e.g. location of various elements in business, investment, finance, profit shifting
- But little direct evidence on elasticity of corporate taxable income with respect to the corporate tax rate
- By contrast, now a significant literature on elasticity of personal taxable income: surveyed by Saez, Slemrod, Giertz (2012)

A Sufficient Statistic?

- The elasticity of taxable income is a sufficient statistic for estimating marginal deadweight cost (Feldstein 1995,1999):
 - if companies optimize over all aspects of behaviour (investment, effort, avoidance and evasion)
 - if costs of generating gross income represent welfare costs to society
- May not hold with externalities, income shifting across tax bases, or only private costs (e.g. potential fines)
- We consider corporation tax, allowing for shifting income in company between salary and profit

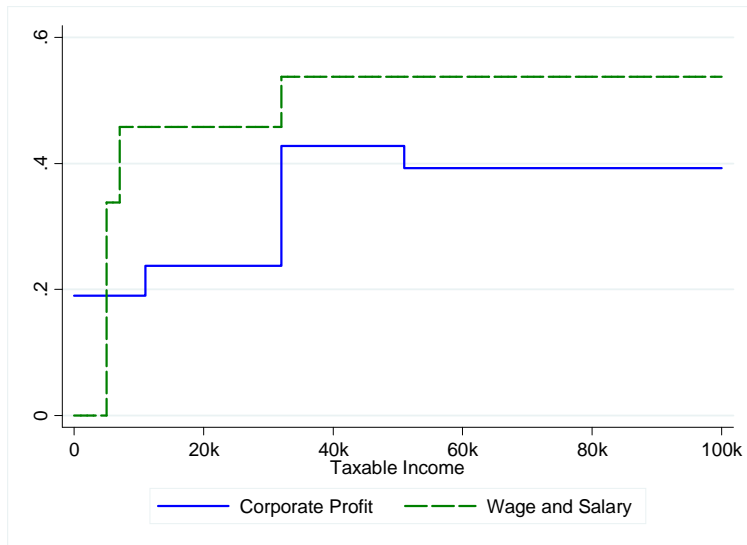
Bunching at the Tax Kink Point



Any Kink Point in the UK Income Tax System in 2002?



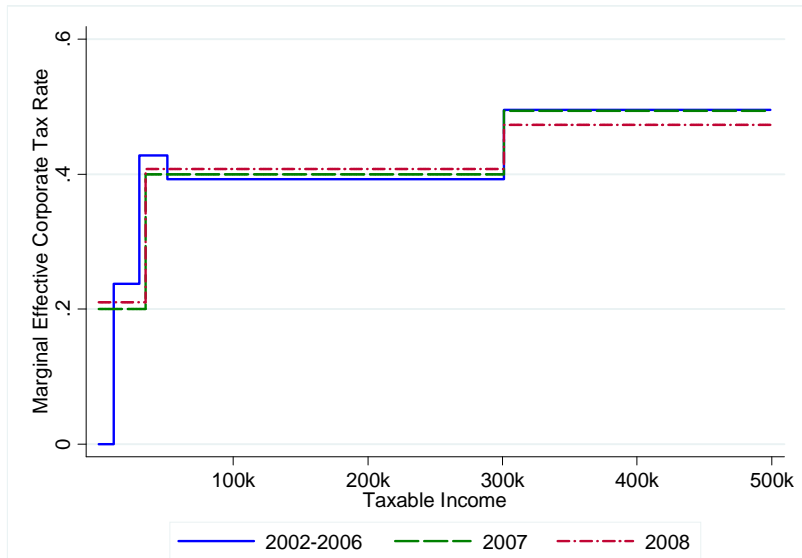
What about in 2004?



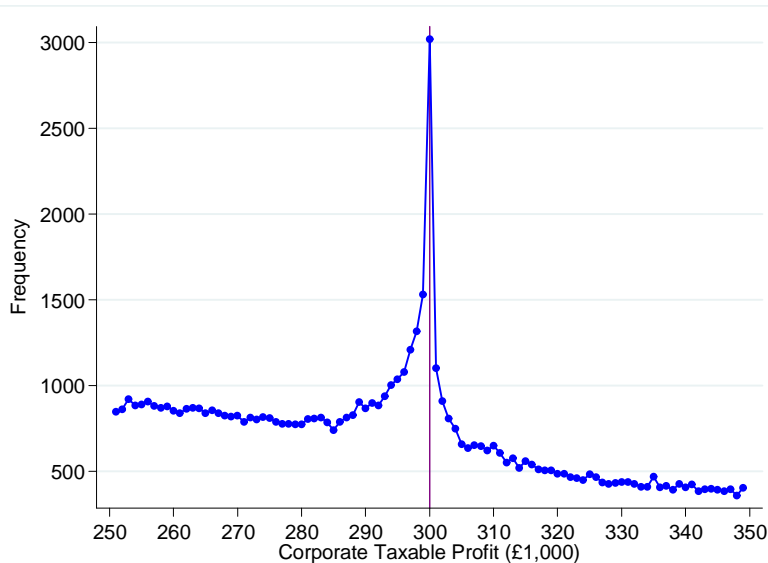
And in 2006?



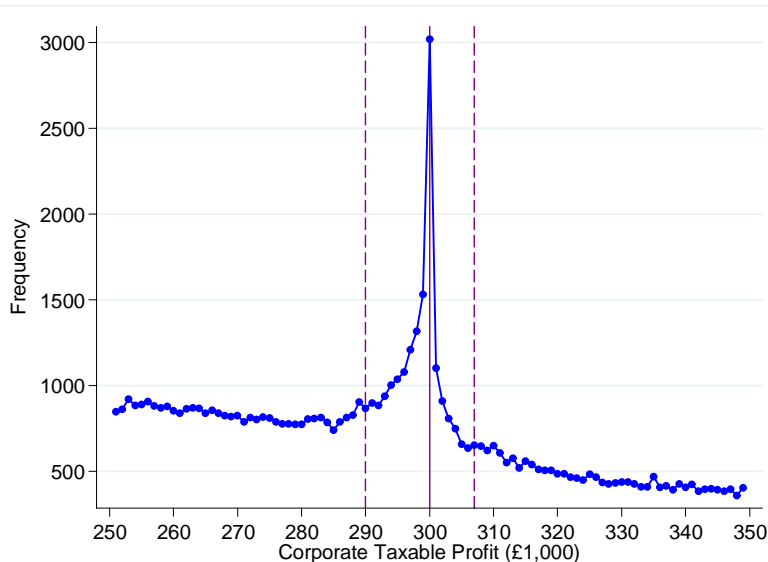
A Stable Kink Point at £300k



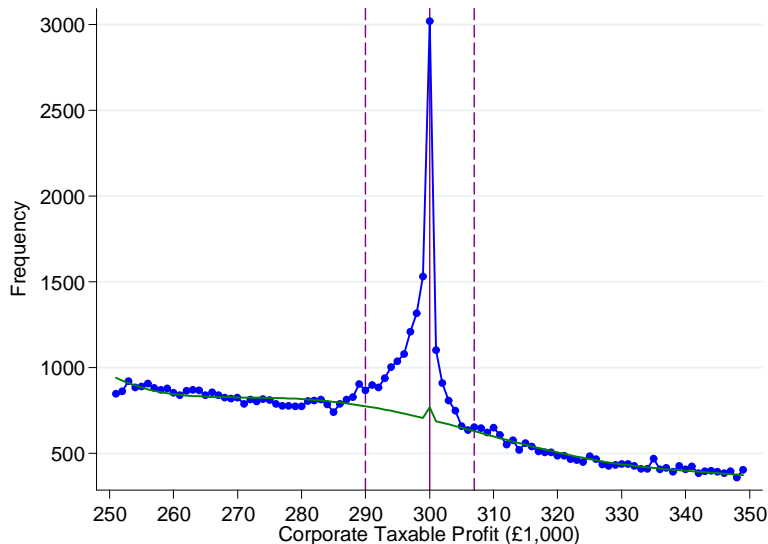
Bunching at the £300k Tax Kink: 2002-2006



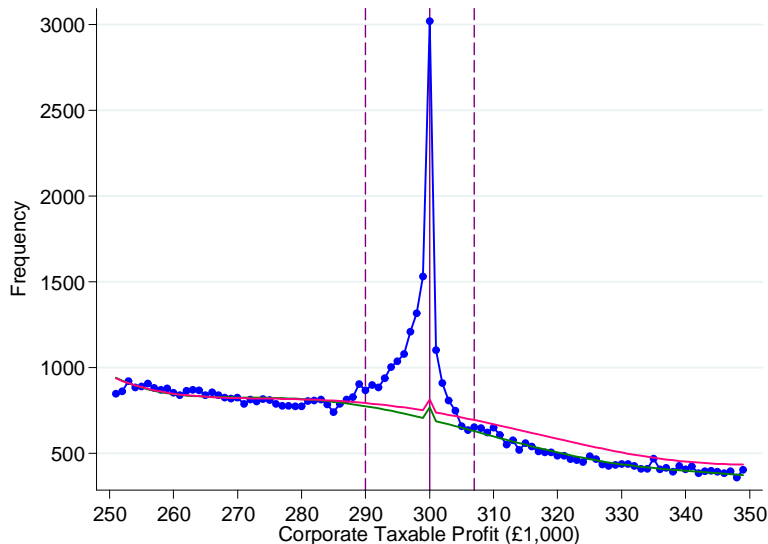
Bunching at £300k: Affected Income Range



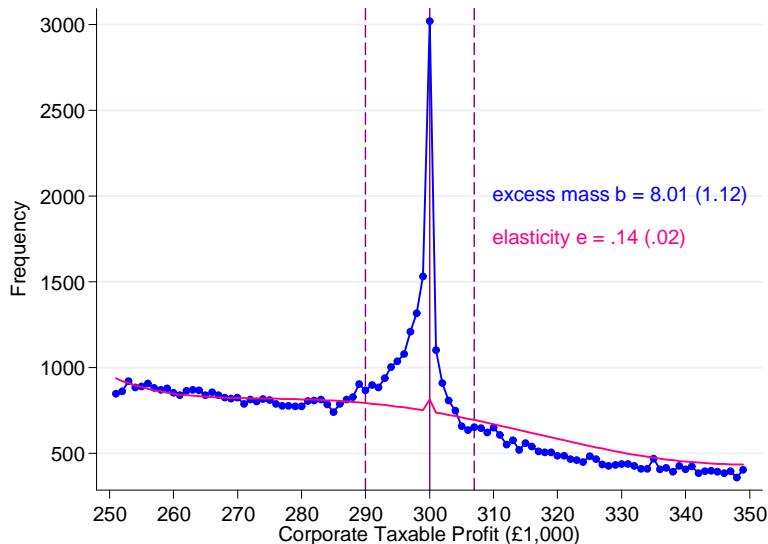
Bunching at £300k: Counterfactual Estimation



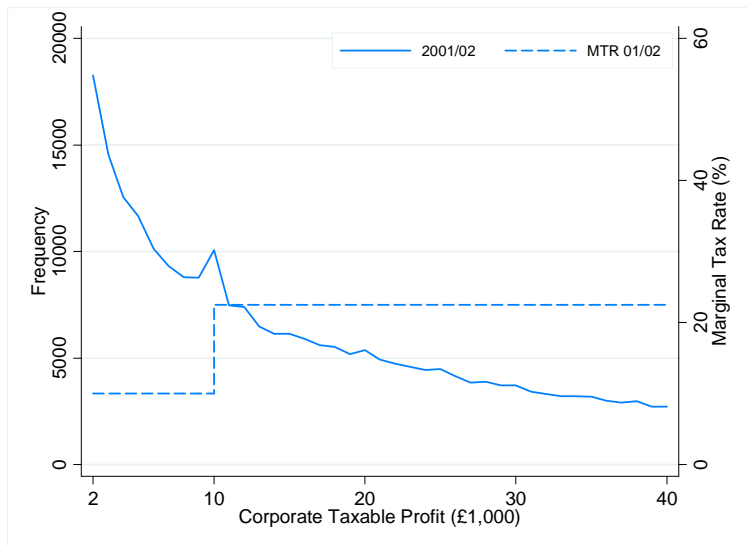
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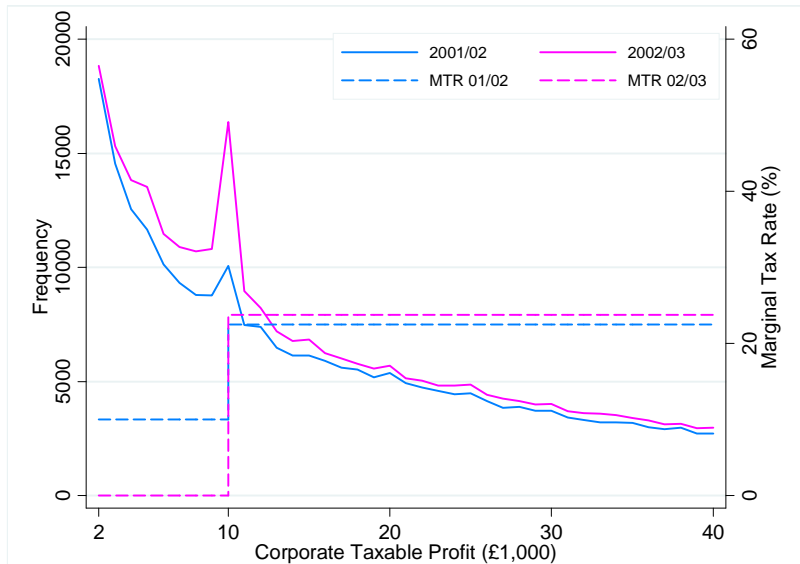
Bunching at £300k: Estimated Elasticity



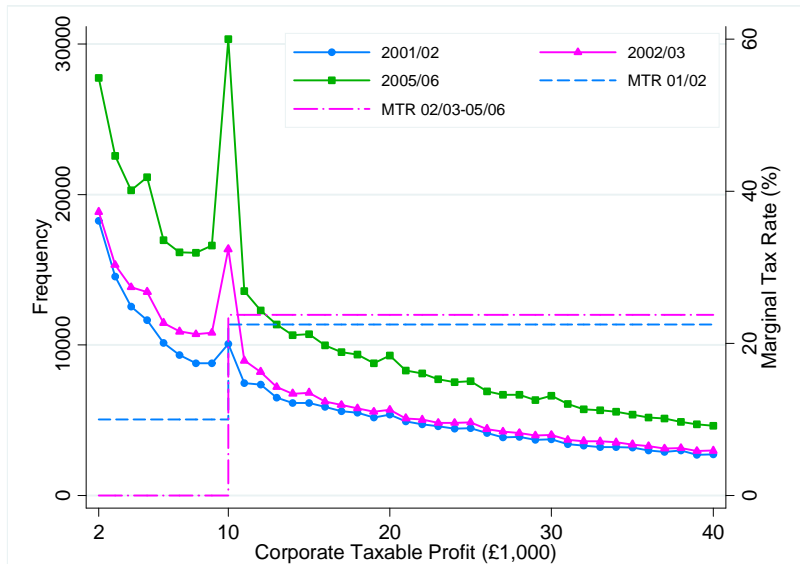
Bunching at £10k: Dynamics



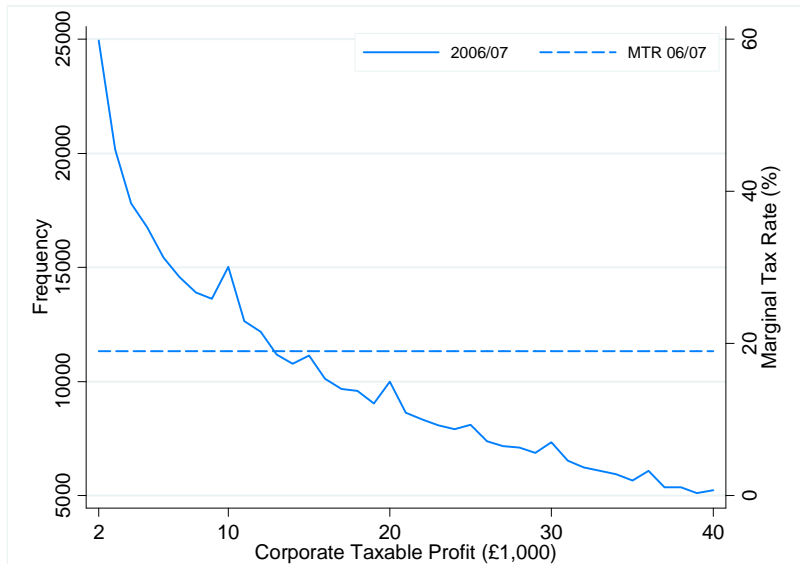
Bunching at £10k: Dynamics



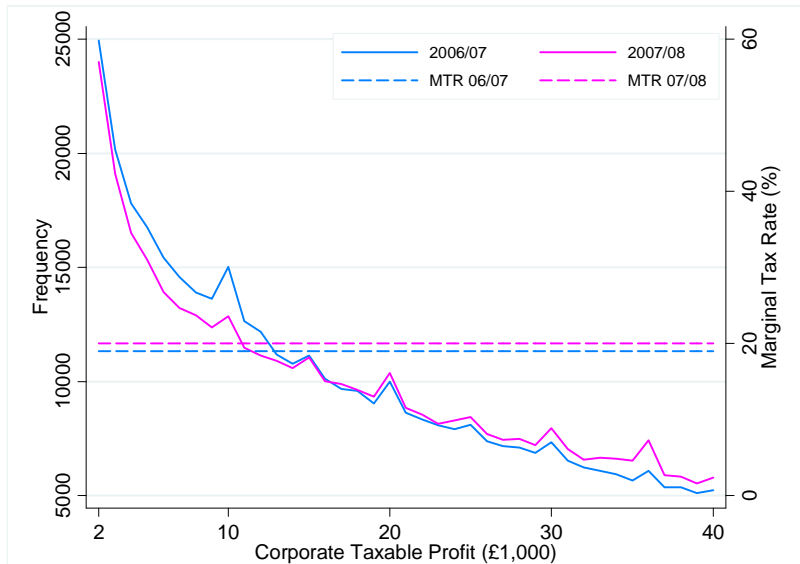
Bunching at £10k: Dynamics



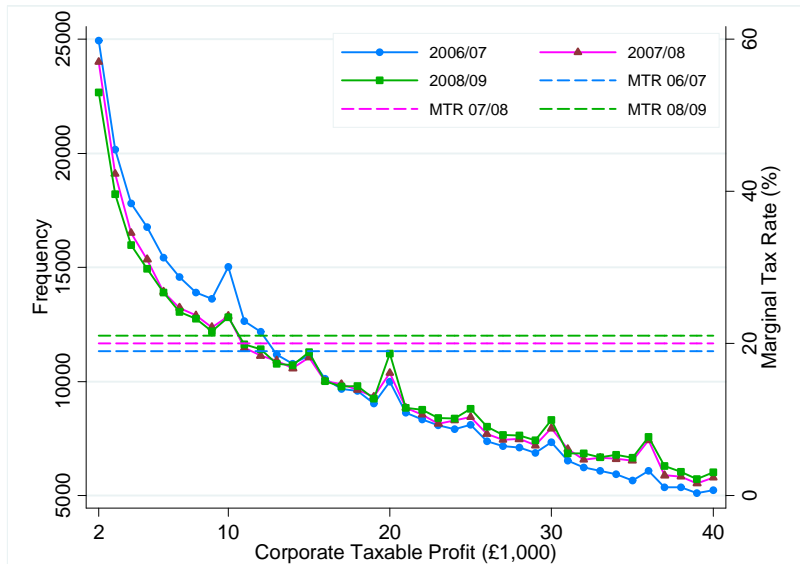
De-Bunching at £10k: Dynamics



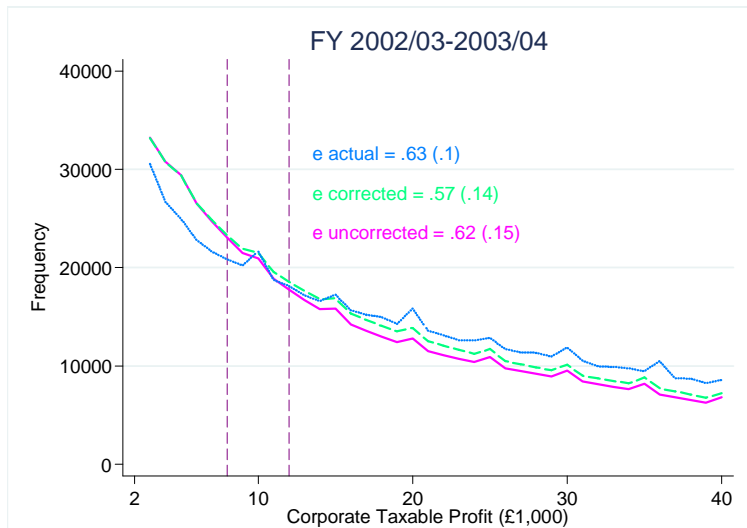
De-Bunching at £10k: Dynamics



De-Bunching at £10k: Dynamics



Estimating the Counterfactual from Post-kink Distribution



Decomposition of the Elasticity around £10k

- Choice between corporate profit and salary for small business owners
- We decompose the elasticity of **corporate** taxable income into two components:
 - the elasticity of **total** taxable income with respect to the statutory corporate tax rate:

$$x = \frac{d \ln B}{d \ln(1 - t_c)}$$

- the elasticity of **income share** declared as profit with respect to the personal and corporate tax rate difference:

$$z = \frac{d \ln s}{d \ln(t_p - t_c)}$$

- We identify x by analyzing companies that bunch at the personal allowance kink:
 - for these companies, $dB = dB_c$ (i.e. profit) and $x = e \cdot B_c / B$

Decomposing the Elasticity of Corporate Taxable Income

Year	Corporate Taxable Income Elasticity x	Total Taxable Income Elasticity e	Elasticity of Income Share Recorded as Profit z_{basic}
2002	0.572 (0.142)	0.309 (0.078)	0.052 (0.001)
2003	0.572 (0.142)	0.309 (0.078)	0.059 (0.002)
2004	0.543 (0.146)	0.199 (0.064)	0.076 (0.002)
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Conclusion

- Clear evidence of variation in the elasticity of corporate taxable income across companies
 - 0.5-0.6 for companies with very low income
 - 0.15 for medium-sized companies
 - we speculate that very large companies may also have a relatively high elasticity
- We estimate the marginal deadweight cost as proportion of additional revenue to be:
 - 8% to 17% for companies with taxable profit between £300k and £1,500k
 - 29% for companies with taxable profit between £10k and £50k

Thank you!