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Tax Competition

1. The Logic of Tax Competition
2. Country Size
3. Empirical Evidence
4. Why has tax competition not eliminated taxes on mobile capital?

In technical terms:

“A striking feature of international tax competition is that independent jurisdictions fully or partially share a mobile tax base. As a consequence, if one country reduces its tax rate strategically to attract mobile capital it provokes an immediate inflow of capital, and this, in turn, creates a fiscal externality (i.e., a shrinking tax base) in other countries (see Wildasin 1989). In the (Nash-)equilibrium, governments are left in a situation where tax rates (on capital and labor) are set at comparably low levels.”

Hence: the logic of tax competition depends on capital mobility.

(which in turn leads to the question how mobile capital actually is…)

To attract a mobile factor of production, one government might reduce its use of a policy instrument that lessens the rate of return on that mobile factor, such as high tax rates or restrictive environmental standards. This policy change creates a negative externality for competitor states or countries that must enact their own reforms to maintain competitive parity. In gametheoretic terms, the states are presumed to face an inescapable “Prisoner’s Dilemma” in which every state has a dominant strategy to make its market more attractive than its neighbors’ markets. In the game’s unfortunate equilibrium outcome, the mobile factor may remain distributed the same as before barriers fell, but all countries and their citizens are in a worse condition, whereas owners of the mobile factor of production reap increased rewards.

Which tax bases are mobile?

-- savings

-- corporate profits

-- corporations? (holdings)

hence:

governments should remove

withholding taxes (capital earnings taxes)

and

corporate profit taxes

The codes used in the formulas correspond to the OECD classification in the OECD Revenue Statistics:
1100 … Taxes on income, profits, and capital gains of individuals;
1200 … Corporate taxes on income, profits, and capital gains;

Is tax competition ‘good’ or ‘bad’? Discuss!

A view on Tax rates on Mobile Capital (Various Sources)

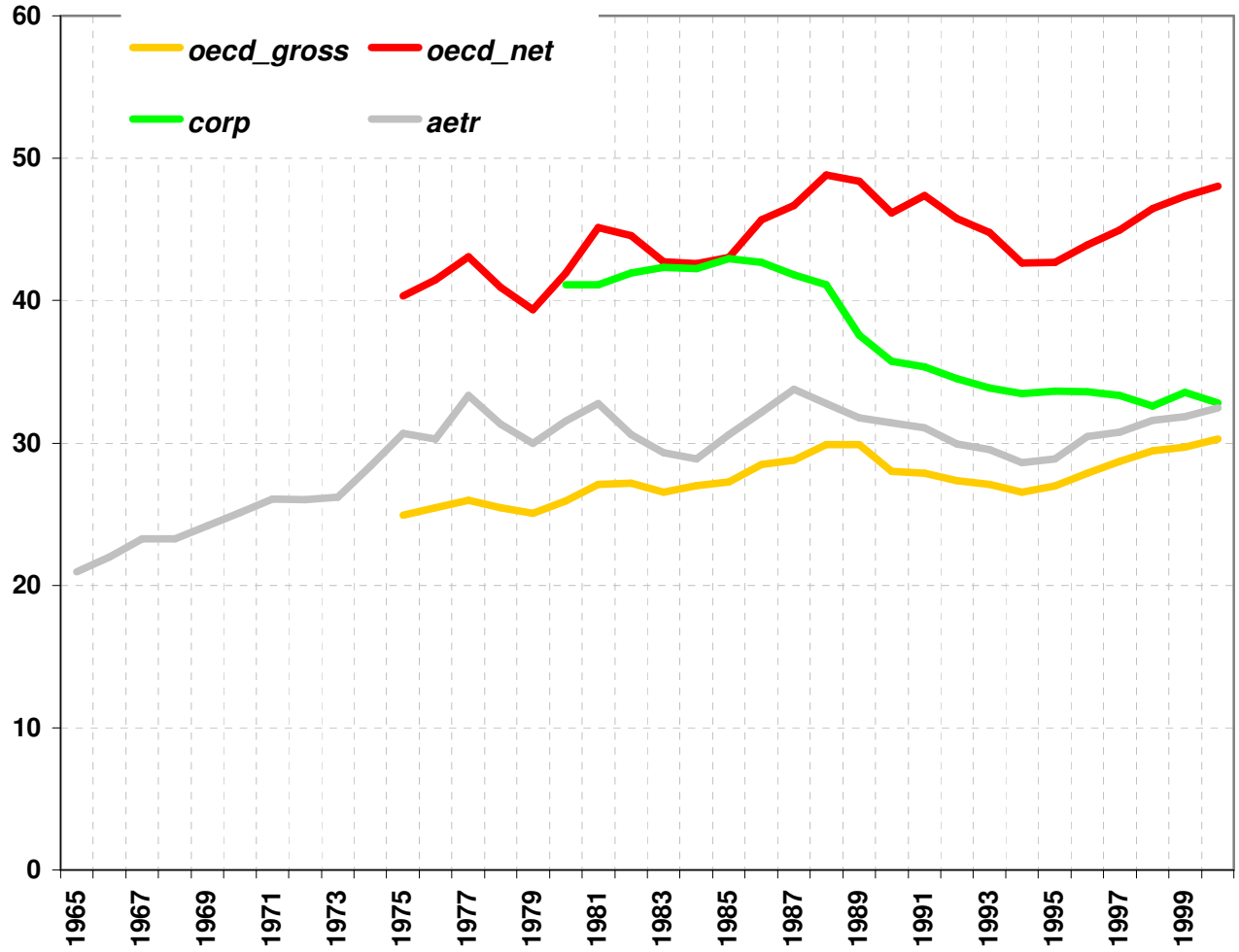
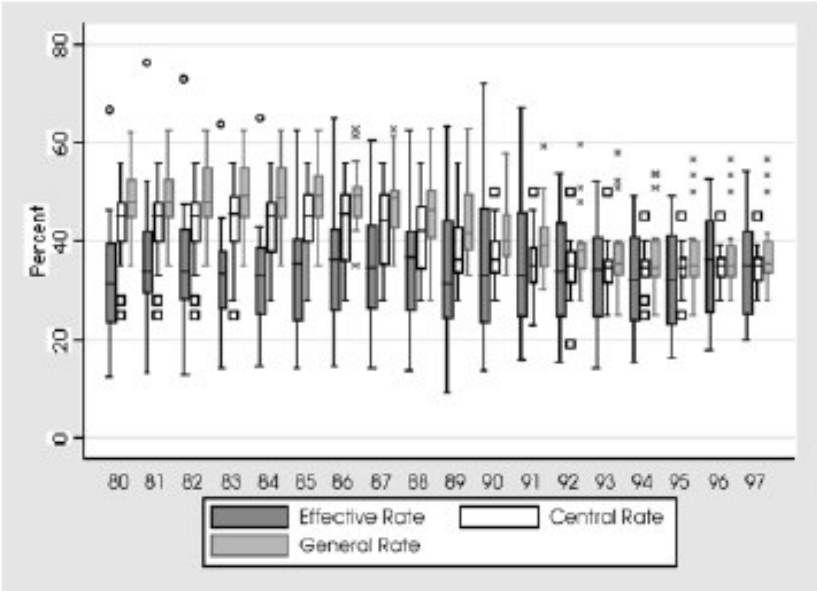


FIGURE 2. Effective Tax Rate on Capital, and Marginal Central and General Government Corporate Tax Rates, 1980–97



Note: The "whisker" is the respective upper or lower quartile ± 3/2 the interquartile distance, the box walls are the interquartile range, and the lines in the middle of the box are the median values.

Has 'globalization' removed taxes on mobile capital bases?

The empirical evidence for the race-to-the-bottom model, however, is weak.Vogel has found that the model is dissonant with actual trends in environmental regulation, and the same is true for tax policy—capital tax burdens have *increased* even as capital became more mobile, with the overall share of revenues provided by corporate income taxes rising from 7.7% in 1975 to 8.4% in 1996 (Genschel 2000).

Why not?

Table 1
Mean and S.D. of corporate statutory and average tax rates, pairs

Pairs of years	Corporate tax rate	
	Mean	S.D.
1980–1985	0.39349	0.10838
	0.39529	0.10812
1980–1990	0.39697	0.10879
	0.36260	0.11406
1980–1995	0.39619	0.10940
	0.32748	0.08385
1985–1990	0.40175	0.10495
	0.36591	0.11416
1985–1995	0.39962	0.10563
	0.32708	0.08374
1990–1995	0.36500	0.11377
	0.32664	0.08760

Source: author's calculations, based on variables described in Ap
different set of country-year observations.

'ears from 1980 to 1995

Average tax rate	
Mean	S.D.
0.02692	0.02943
0.02847	0.02919
0.02724	0.02984
0.02921	0.03019
0.02329	0.02387
0.02342	0.01579
0.02713	0.02820
0.02839	0.02869
0.02648	0.02853
0.02250	0.01515
0.02726	0.03064
0.02272	0.01534

dix A. Note that each pair is based on a

Table 2
Regressions explaining statutory corporate tax rate

	(1)	(2)	(3)	(4)	(5)
Year (1985)	− 0.0097	0.0125	0.0113	− 0.0042	− 0.0132
	(0.5058)	(0.7353)	(0.6948)	(0.3557)	(0.8997)
Year (1990)	− 0.0257	0.0384	0.0077	− 0.0471	− 0.0752
	(1.3645)	(1.2449)	(0.2281)	(1.4619)	(1.6426)
Year (1995)	− 0.0582	0.0186	− 0.0109	− 0.0912	− 0.1256
	(3.1741)[b]	(0.5899)	(0.3168)	(2.6306)[b]	(2.5164)[a]
Indrate		0.3159	0.2774	0.113	0.1015
		(8.6227)[b]	(6.9391)[b]	(2.0017)[a]	(1.6062)
Indrate*no cap		− 0.004	− 0.0277	− 0.0048	− 0.0017
		(0.0914)	(0.6489)	(0.1258)	(0.0394)
Indcmiss		0.0252	− 0.0036	− 0.0102	− 0.0177
		(0.8992)	(0.1135)	(0.3280)	(0.4040)
Exp_gdp		0.1278	0.0779	0.0047	0.0747
		(2.2180)[a]	(1.3265)	(0.0468)	(0.6580)
Ln_elec		− 0.0139	0.0044	0.0608	0.0709
		(2.6236)[b]	(0.7687)	(2.6121)[b]	(2.5630)[a]
Oil3		4.1454	1.5658	2.4863	3.8961
		(2.5349)[a]	(0.7381)	(1.2132)	(1.6140)
Openness			− 0.0555		− 0.0294
			(3.8147)[b]		(1.6213)
Ln_pop			0.006		0.1055
			(1.2441)		(1.1625)
Trade			0.0121		0.0228
			(1.0058)		(0.5471)
Constant	0.3744	0.2533	0.1152	− 0.0902	− 1.9016
	(26.9413)[b]	(4.7477)[b]	(1.1128)	(0.5367)	(1.2767)
Country fixed effect	No	No	No	Yes	Yes
Observations	381	237	202	237	202
R^2	0.0315	0.3443	0.3776	0.0088	0.0608

Absolute value of *t*-statistics in parentheses.
[a] Significant at 5% level.
[b] Significant at 1% level.

The Effect of Country Size

Small countries should act more aggressively in tax competition, because for them the tax base effect is more important than the tax rate effect. In large countries, the tax rate effect is more important than the tax base effect.

The Effect of Veto-Players

Hallerberg and Basinger argue that the extent of tax cuts depends on the number of veto-players (actors that can veto reforms). The more veto-players, the lower tax cuts.

The Effect of Budget Constraints

Governments in countries with budget deficits are less likely to reduce tax rates (Plümper, Winner, Troeger).

1. Estimation Results

independent variable[a)]	$CTAX_i$	*LCTAX*	*CTAX/LCTAX*
$CTAX_{-i}$	0.604**	-0.923***	1.434***
	(0.312)	(0.236)	(0.399)
RIGID	0.344***	0.321***	0.118#
	(0.085)	(0.039)	(0.083)
EQUITY	0.147***	0.036***	0.053**
	(0.052)	(0.010)	(0.027)
SIZE	0.430***	0.069***	0.356***
	(0.039)	(0.015)	(0.032)
GDPPC	0.368***	0.336***	-0.007
	(0.047)	(0.021)	(0.043)
Observations	467	467	467
Cross sections	21	21	21
R^2	0.944	0.954	0.951
Country effects: $\chi^2(20)$	3846.70***	1330.20***	3391.17***
Excluded instruments:[b)] F(*DF1,DF2*)	37.88***	13.23***	32.88***
	(4,338)	*(2,440)*	*(2,440)*
Wu-Hausman test:[c)] F(*DF1,DF2*)	2.00#	27.44***	7.14***
	(1,440)	*(1,440)*	*(1,440)*
Sargan test:[d)] χ^2 (*DF*)	4.16	0.00	0.36
	(3)	*(1)*	*(1)*

Notes: Standard errors in parentheses. *** significant at 1%; ** significant at 5%; * significant at 10%; # significant at 15%. [a)]Constant and country effects not reported. [b)]F-Test for excluded instruments. [c)]Wu-Hausman F-statistic (H_0: regressor is exogenous (i.e., OLS is consistent and efficient)). [d)]Sargan-Test for overidentifying restrictions.

Is tax competition good or bad?

Bad, if we believe that governments are social welfare maximizers, the provide the optimal amount of public and private goods.

Good, if we believe that governments tend to overtax the society, provide useless benefits to a small minority of important voters and influential individuals.