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- who cares about tax havens ?
  the OECD, the EU, economists who care about tax competititon

a simple story of tax avoidance

- home country uses exemption (separate accounting) system for tax treatment of foreign subsidiaries
  (like Canada, most European countries, unlike USA)
- parent corporation in home country transfers paper profits to subsidiary in low–tax country
  e.g. : transfer pricing, royalty income, borrowing from subsidiary (“thin capitalization”)
- so effective tax on parent company is lowered by use of tax havens

literature review

- most of theoretical literature focuses on competition among (potential) home countries
- toleration of tax havens allows countries to discriminate among firms (preference for firms in sectors where intangibles are more important)
- so toleration of tax havens may affect competition of home countries for (tangible) investment
- Janeba and Peters (*EJ*, 1999), Keen (*Nat. Tax J.*, 2001), Janeba and Smart (*ITAX*, 2003), Bucovetsky and Haufler (*JIE*, 2008), Hong and Smart (*EER*, 2010), Marceau, Mongrain and Wilson (*JIE*, forthcoming)
- in all these papers, tax havens are an exogenous device for reducing effective tax rates on some firms
- only one theoretical tax competition paper in which countries get to choose whether to be tax havens

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- S & W model countries' choice between being "normal" high–tax jurisdiction (where production takes place), and "parasitic" tax haven (where income gets concealed)
- neat, realistic result : it's the small countries that choose to be tax havens
- technology : concealment of taxable income requires the use of (scarce) resources in the tax havens

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- so there is an upward–sloping supply curve for tax havens
- implication : coordinated tax cutting by "normal" countries — starting at the Nash equilibrium — is beneficial, as rents earned by tax havens are reduced

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- assumption : to become a tax haven, a country chooses a fee x to charge for incorporating a subsidiary, and promises not to tax the income of that subsidiary
- (related) problems :
  (1) how are fees determined? why doesn't Bertrand competition drive them down to 0?
  (2) how do tax havens make credible their promise not to tax?

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- answer (Bucovetsky) : no
- reason : the (endogenous) tax havens' fees increase proportionally to the home country tax rates

Tax Havens :

- have small populations
- tend to charge a (very low) flat fee for incorporation of multinationals' subsidiaries
- (sometimes) don't have any corporate income tax at all
- operate in plain sight ; no concealment is provided
- try hard to convince people that they're reputable

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a simple reputational model

- each firm has an exogenous amount of income z which it can shelter offshore
- the amount of income which can be sheltered differs across firms ; $F(z)$ is its distribution function
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- paying an annual fee to a tax haven enables a firm to avoid paying any taxes at all on the shelterable income z
- so firms will use offshore tax havens if and only if their shelterable income is more than

$$z_1 \equiv \frac{x}{\tau}$$

where τ is the tax rate in the home country, and x the annual fee in the tax haven

fees charged by tax havens

- firms regard tax havens as perfect substitutes for each other and so will incorporate in the lowest–priced tax haven
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fees charged by tax havens

- firms regard tax havens as perfect substitutes for each other and so will incorporate in the lowest–priced tax haven
- difference from Slemrod–Wilson : tax havens don't incur any costs
- what prevents Bertrand competition from driving fees to 0?

the temptation to confiscate

- what makes credible tax havens' governments' promise not to tax subsidiaries' income?
- with footloose paper assets, firms could always repatriate offshore earnings to the home country ; the most a tax haven can confiscate is τz
- commitment not to confiscate is credible only if the shelterable earnings of subsidiaries in the tax haven are less than the value of foregone future annual fees due to loss of reputation

credibility condition

- the tax haven with the lowest fee (or tied for the lowest fee) will be tempted to confiscate unless

$$\tau \int_{z_1}^{\infty} z dF(z) \leq \frac{1}{\delta} x(1 - F(z_1)) \tag{1}$$

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- simple equilibrium : each tax haven charges the lowest x for which condition (1) holds

invariance result

- since $x = \tau z_1$, the cut–off level of shelterable income in a simple equilibrium is the lowest (positive) value of z_1 for which

$$\delta \int_{z_1}^{\infty} z dF(z) - z_1(1 - F(z_1)) = 0 \tag{2}$$

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  if such a z_1 exists
- τ does not appear in equation (2) : a fall in rest–of–the–world tax rates results in an equiproportional fall in tax havens' fees in the new equilibrium, so that tax sheltering activity is unchanged

adding trembles

- what if tax havens cannot provide 100% assurance to multinationals?

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  [implicit assumption : firm can move paper profits from one tax haven to another to escape confiscation, but only if a subsidiary in the second tax haven has already been incorporated]

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- so the temptation to confiscate is reduced
- and the simple equilibrium is a little more complicated (since z_2 depends on tax havens' fees)

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- also : longer–lasting reputation effects lead (in the new equilibrium) to less tax sheltering activity
- the effects of changes in the probability γ of a regime shift could go either way : less stable tax havens could lead to more tax–sheltering activity

timing

(all moves in each stage are simultaneous)

1. countries decide whether to be “normal” [tax firms’ profits] or tax havens [charge fees, promise not to tax reported profits of multinational subsidiaries]

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5. multinationals allocate “movable” profits to their subsidiary in the jurisdiction with the lowest tax rate
6. nature moves : coup occurs with probability γ in each tax haven
7. the game starts again ; tax havens which reneged on their promises are punished

equilibrium

equilibrium of interest :

- several countries choose to be tax havens in stage 1
- all tax havens choose the same fee x in stage 2
- multinationals believe their promise not to tax their subsidiaries
- tax havens choose not to tax

tax–setting subgame

if all tax havens chose the same fee x in stage 2, then they will choose not to renege on their promise in stage 4 if and only if

$$\tau \int_{z_1}^{z_2} z dF(z) \leq \frac{1}{\delta} x(1 - F(z_1)) \tag{4}$$

where

$$z_1 = \frac{x}{(1-\gamma)\tau}$$

$$z_2 = \frac{x}{\gamma(1-\gamma)\tau}$$

fee–setting subgame

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and that x is big enough that several countries do choose to become tax havens in the initial stage 1 of the game