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

## a simple story of tax avoidance

- home country uses exemption (separate accounting) system for tax treatment of foreign subsidiaries  
(like Canada, UK, 95 % of France, Germany and Italy, 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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- only one theoretical tax competition paper in which countries get to choose whether to be tax havens :  
Slemrod and Wilson (*J Pub Ec*, 2009)

## Slemrod and Wilson (2009)

- 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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- technology : concealment of taxable income requires the use of (scarce) resources in the tax havens
- 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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- how many resources does it take to be a tax haven?
- in my model, there is no cost to becoming a tax haven
- 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

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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 (Slemrod and Wilson) : yes
- 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

## firms that use tax havens

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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  $\tau$  is the tax rate in the home country, and  $x$  the annual fee in the tax haven

# fees charged by tax havens

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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  $\tau Z$
- 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

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

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- an annual fee  $x$  will be credible only if it is high enough that condition (1) holds
- 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

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- $\tau$  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

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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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  - (i) an exogenous regime shift with probability  $\gamma$
  - (ii) the current government in tax haven  $j$  reneges on its promise not to tax
- I'm looking for an equilibrium in which (ii) does **not** happen ; tax haven  $j$  chooses not to confiscate as a best response to tax havens  $1, 2, \dots, j - 1, j + 1, \dots, n$  choosing not to confiscate

# the temptation to confiscate II

- with diversification, the net gain from confiscation is proportional to

$$\sum_{j=1}^{n-1} j \int_{z_j}^{z_{j+1}} \psi_j(z, x) dF(z) + n \int_{z_n}^{\infty} \psi_n(z, x) dF(z) \quad (3)$$

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- if no other tax haven confiscates, and if all tax havens charge the same fee  $x$
- where  $n$  is the number of tax havens, and

$$z_j(x) \equiv \frac{x}{\gamma^{j-1}(1-\gamma)\tau} \quad (4)$$

and

$$\psi_j(z, x) \equiv \gamma^{j-1}\tau z - \frac{x}{\delta} \quad (5)$$

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- complication : if  $x^* > 0$  is the lowest positive fee for which expression (3) is non-negative, will tax haven #1 want to undercut the others, when tax havens 2, 3, . . . ,  $n$  charge a fee of  $x^*$ ?

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- maybe : it depends on the shape of the distribution  $F(\cdot)$  of shelterable income