

# tax havens and (rest-of-world) tax rates

- do higher corporate income taxes in industrialized countries lead to more use of offshore tax havens by multinationals?
- answer (Slemrod and Wilson) : yes
- why? : tax havens provide “concealment services” which use scarce (immobile) local resources as inputs, so there’s an upward-sloping supply function for tax havens
- here, in contrast : tax rates in the rest-of-the-world have no effect on multinationals’ tax sheltering activity

# 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

- tend to be in footloose industries (shipping, finance, software, international engineering services)
- incorporate lots of different offshore subsidiaries
  - some in different tax havens

# 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
- 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

- 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

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

where  $\delta$  is the rate it uses to discount future fees (which would be foregone if it loses its reputation)

- 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

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

if such a  $z_1$  exists

- $\tau$  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

# adding trembles

- what if tax havens cannot provide 100% assurance to multinationals?
- add an exogenous, unavoidable probability  $\gamma$  of a regime shift in the tax haven
- which is independent across different tax havens
- this would explain diversification by multinationals : incorporating subsidiaries in 2 tax havens lowers the probability of confiscation [due to regime shift] from  $\gamma$  to  $\gamma^2$   
[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]

# consequences of diversification

- all firms with shelterable income above some threshold level  $z_2$  will diversify
- a tax haven can confiscate only from firms with shelterable income between  $z_1$  and  $z_2$
- equation (2) becomes

$$\delta \int_{z_1}^{z_2} z dF(z) - z_1(1 - F(z_1)) = 0 \quad (3)$$

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

# results : the model with diversification

- the invariance result still holds (since  $z_2$  as well is proportional to  $\frac{x}{\tau}$ )
- also : longer-lasting reputation effects lead (in the new equilibrium) to less tax sheltering activity
- the effects of changes in the probability  $\gamma$  of a regime shift could go either way : less stable tax havens could lead to more tax-sheltering activity