

### **Discussion**

of

"International Profit Shifting within Multinationals: A Multi-Country Perspective" "Capital Structure and International Debt Shifting"

#### Alfons J. Weichenrieder

Johann Wolfgang Goethe-Universität Frankfurt & CESifo



# Profit Shifting (Huizinga/Laeven)

- How much profit shifting is there?
  - Grubert, Goodspeed und Swenson (1993)
  - Hines and Rice (1994): a one percentage point increase in the host country tax rate reduces reported EBIT of U.S. affiliates by some 3 percent.
  - Huizinga/Laeven: one point decrease in CT increases reported EBIT by some 1.4%

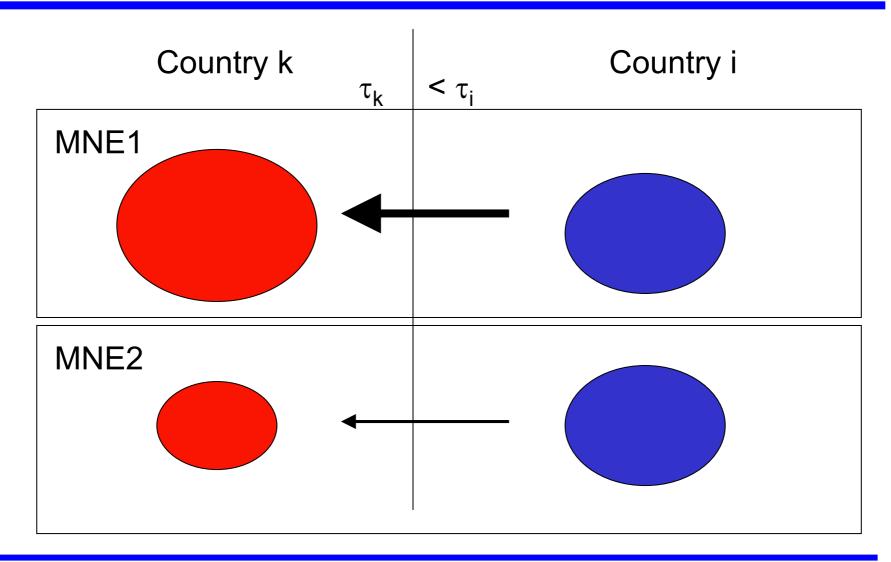


- Location and size of subsidiaries are assumed as given.
- Shifting cost (symmetrically) increase in the ratio (Shifted Profits/True Profits.)
- True profits are assumed to derive from a Cobb-Douglas Production function with identical factor shares across countries.
- Reported Profits / EBIT is regressed on variables that are thought to influence true profits and profit shifting.



- Tax differential alone are not significant.
- Additional variation in shifting incentives is produced by variation in size.







# Simulations highly informative

 In 1999 Germany may have lost a quarter of its tax base from multinationals.



### Potential Problems

- Size may correlate with productivity
- Reporting conventions: high-tax countries may have laxer reporting conventions and therefore lower reported income.
  - Allowing for country clustering?
- Even non-consolidated returns include foreign repatriated profits.



- Possible cross check
  - Exploit panel data
  - Panel data may allow to reduce structure
  - Weichenrieder (2006): Ten percentage point reduction in home country tax rate reduces reported profitability of German (profitable) subsidiaries by half a percentage point.



# Debt Shifting (Huizinga/Laeven/Nicodeme)

- Empirical results
  - An increase in the tax rate of the host country increases average debt to asset ratio by 1.8 percentage points (domestic effect).



#### Previous estimates

- Altshuler and Grubert (2003) consider a cross-section of US subsidiaries abroad:
   A 1 percentage point increase in the foreign tax rate is associated with an increase of roughly .4 percentage point in the debt to total asset ratio.
- Desai, Foley, and Hines (2003):

   A 1 percentage point increase in the foreign corporate tax rate leads increases third-party debt by .25 percentage points internal borrowing by some .08 percentage points (FE-estimates).



 Ramb/Weichenrieder (2005): no effect of home country tax rate. Differential effect of host country tax.

 Mintz/Weichenrieder (2005): 1 percentage point tax increase leads to an estimated 0.4 percentage point increase in the debt-asset ratio.

Effect is even more pronounced for wholly-owned firms.



### Possible improvements

- Non-linear effects.
- Subsidiary fixed effects rather than parent fixed effects.
- Clustering on country and firm level.
- Inflation may be accompanied by a variable for interest cost.