Stay at Home or Go Aboard? The Impact of Fiscal and Legal Environments on the Geography of Private Equity Flows

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Summary of the paper

- Research question:
  - How do fiscal and legal environments affect the geography of private equity investments?

- Strategy:
  - Empirical exercise using a *unique* European dataset from 2000-2006 (ZEPHYR database) covering
    - 15 European countries
    - Domestic: 5,864 deals, €85 bil. (avg. €14.5 mil./deal)
    - Cross border: 1,313 deals, €79 bil. (avg. €60 mil./deal)
    - Internationalization shares: ??

Main findings

- Favorable fiscal and legal environments increase the number and volume of domestic deals.

- A difference of fiscal environments affect investment flows from one country to another country.

- A favorable legal environment encourages investors to stay at home.

- The results are robust to different proxies, different specifications, and also different data sources.

- **Summary:** Fiscal and legal environments influence private equity investors' behaviors in (i) investing domestically, (ii) investing aboard, (iii) having more internationalization shares

What has been done?

(1) Domestic Deals (DD)

- Left-censored Tobit model (102 obs.)
- Dependent variables:
  - Number of deals/1,000 inhabitants
  - Volume in mil. euros/total population
- Explanatory variables:
  - **Intermediaries' fiscal environment (+)**: EVCA's index
  - Capital gains tax rate
  - **Shareholder index (+ only by volume)**
- Control variables:
  - New funds by PF and IC, New funds by government, **Returns (+ only by #), SM listed companies (+)**

What has been done?

(2) Cross Border Deals (CB)

- Left-censored Tobit model (210 country-pairs, 1,386 obs.):
- Dependent variables:
  - Number of deals/1,000 inhabitants
  - Volume in mil. Euros/(pop_i x pop_j)$^{0.5}$
- Explanatory variables (Δ):
  - Δ **Intermediaries' fiscal environment (+)**: *Investors from favorable fiscal countries tend to go aboard to invest in less favorable countries (check?)*
  - Capital gains tax rate
  - Δ **Shareholder index (-):** *Investors from strong legal countries are more likely to stay home.*
- Control variables (Δ):
  - Δ New funds by PF and IC, Δ **New funds by government (- only by #)**, Δ Returns, Δ SM listed companies, **same law (+)**, same language, **distance (-)**

What has been done?

(3) Internationalization Shares (IQ)

- Left- and right-censored Tobit model (102 obs.)
- Dependent variables:
  - % of internationalization shares
- Explanatory variables:
  - **Intermediaries' fiscal environment (+)**: *investors from favorable fiscal countries go aboard more often.*
  - Capital gains tax rate
  - **Shareholder index (-):** *investors from strong legal countries prefer staying at home*
- Control variables:
  - **New funds by PF and IC (-)** , New funds by government (- only by #), Returns, SM listed companies

General remarks (I)

- Important question, helping us to understand the private-equity investment flows across countries.
- Careful discussion on theoretical predictions (demand/supply sides)
- Careful robustness checks: measurement errors, clustered sample, selection bias, econometric issue (many zeros)

General remarks (II)

- Research question:
  - (Author) How fiscal and legal environments matter? OR
  - (My feeling) Does fiscal and legal environments matter?

    * At current version, it does not provide any evidence on mechanisms through which fiscal and legal environments affect the investors' choice of investment.

- Does the paper need to focus only on one instead of all three?
  - e.g., Cross-Border Deals (more rigorous analysis based on the gravity model and including the analysis of internationalization shares as a part of the story)
  - However, there are several competitive papers such as Aizenman and Kendall, Sept. 2008, « The Internationalization of Venture Capital and Private Equity »
    - Covering three decades, 100 countries including Europe

General remarks (III)

- Writing style: Economic vs. Finance
  - At least in current version, the paper is not easy to read.
    - Too many unnecessary abbreviations
    - Long theoretical discussion for empirical predictions
      - Quite complicated demand/supply shifts explanation
      - Is there a theory on Internationalization shares?
- Do level and cross border Private-Equity transactions special?
  - What novel lessons we learn from this compared to those in cross border M&A, Cross-listing IPO, …
- Probably need to pay more attention on what the paper shows/ what the paper does not show (Level vs. Changes)

Explanatory variables

- A major explanatory variable: EVCA's Benchmark Report 2006 index
  - 9 items (only when there is a variation) have been chosen.
  - Take the average value in the regression.
  - Value 3 if yes and 1 otherwise (some cases 2)
- Concerns:
  - What does it actually mean? Economic implication?
  - UK got best rating (3) in all items.
  - Endogenous by construction?
  - What this index is really measured?
    - 30.5% negatively correlated to Corporate income tax
    - 40.5% positively correlated to Shareholder index
  - Probably need to think about some alternative proxies.
    - Grouping into More favorable/Less favorable
    - Rethink about the capital gain taxes (Benefits outweigh costs, then you go)

Minor remarks (I)

- Tables are not self-contained.
- Don’t understand in those main tables: Domestically syndicated cross-border deals are …(i) split up, (ii) labeled cross-border, (iii) labeled domestic.
- It is unclear about the purpose of the empirical tests on Internationalization shares (IQ).

Minor remarks (II)

- Other control variables: Industry effects (High-tech/Low-tech, Industry structure), Market cap/GDP, # IPOs, …
- Probably need to discuss more about multicollinearity issues since many of the variables are very highly correlated.
- Not clear to me how to interpret the results of Δ fiscal environments.

Wrap up

- Very much enjoy reading the paper.
- Learn a lot for a non-specialist on private equity like me.
- Take ONLY relevant points from my comments.
- Recommend to read.

THANK YOU VERY MUCH