Financing TBSF’s in Europe: the ambiguous role of venture capital and high-tech stock markets

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Introduction

- Technology-Based Small Firms: Small business whose output largely depend on the application of scientific and technological knowledge
- TBSFs: drivers of technical change (Schumpeter Mark I)
- A "usual" question:
- Where do European TBSFs take the money from?
  - An empirical survey: France, Germany, Italy, UK.
    « Financing Technology-Based Small firms in Europe : What do we know ? », with S. Sapio, LEM, (2010)

Further questions...

– Are European financial intermediaries and markets synonims of “bridges” and “facilitators” for entrepreneurial innovation? (Schumpeter 1911)

– How do exactly VC and stock markets contribute to the entrepreneurial process and to the continued growth of the firms listed?

– To what extent the intermediation of VC and stock markets is privately and socially desirable (Da Rin, 2010)?

Outline of the talk

1. The Venture Capitalist: a coach or a scout?
2. The “effective” characteristics of high-tech stock markets versus the AIM
3. Conclusion

1. The venture capitalist: a coach or a scout?

- Main trends
  - Europe-USA catching up in VC amounts invested (Oehler, Pukthuanthong, Rummer and Walker, 2007) (Figure 1)
  - Heterogeneity among European countries (Figure 2)
    - UK: growing VC then the recession effects
    - Continental Europe: stagnating VC (lack of exit opportunities?)
    - The concern of early stage VC remains (Murray, 2010)

Figure 1. Venture capital investments in the USA and in 4 European countries (France Germany, Italy, UK): 2000-2007. Source: EVCA, NVCA

VC = Seed + Start-up + Expansion

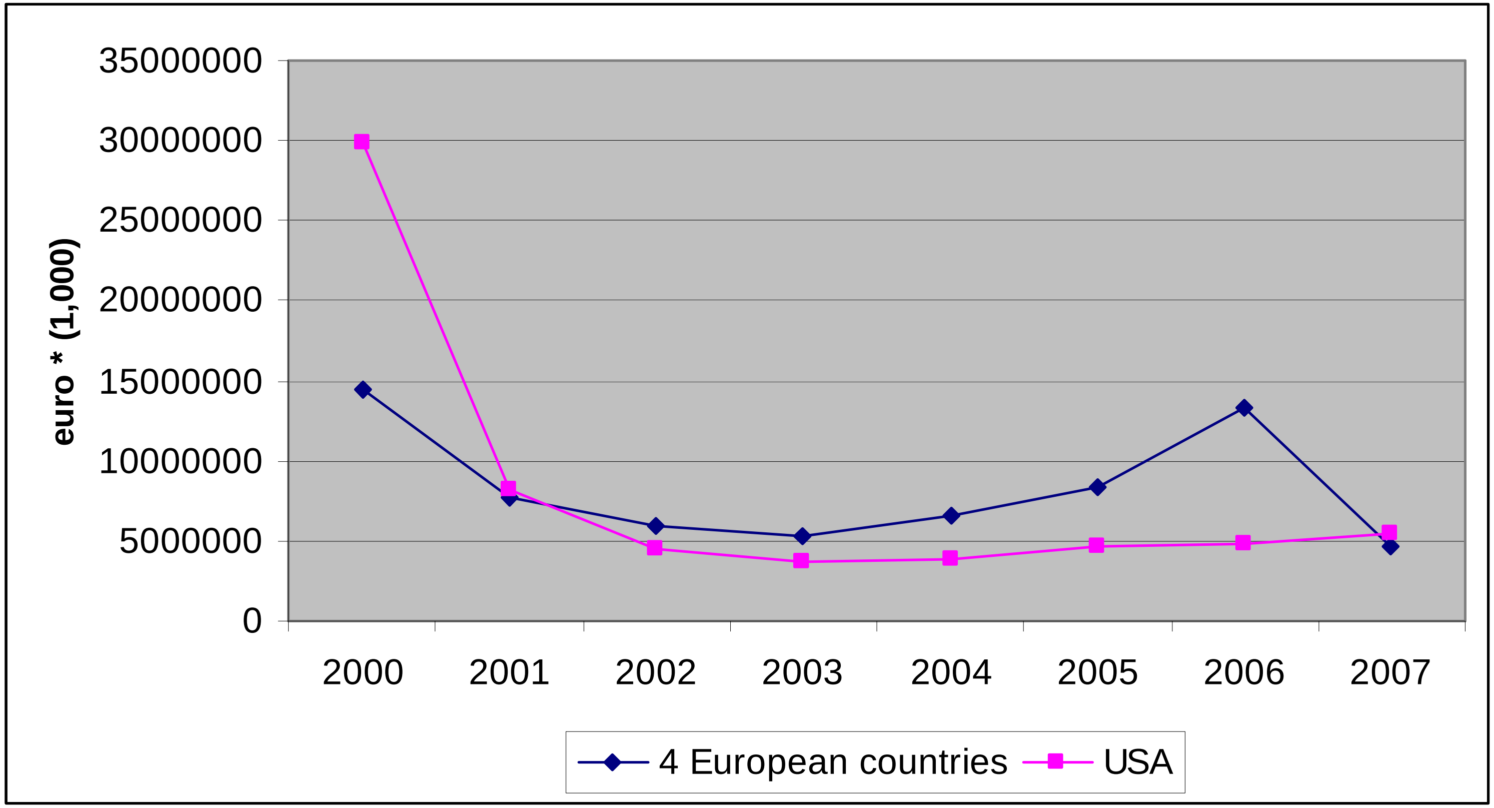
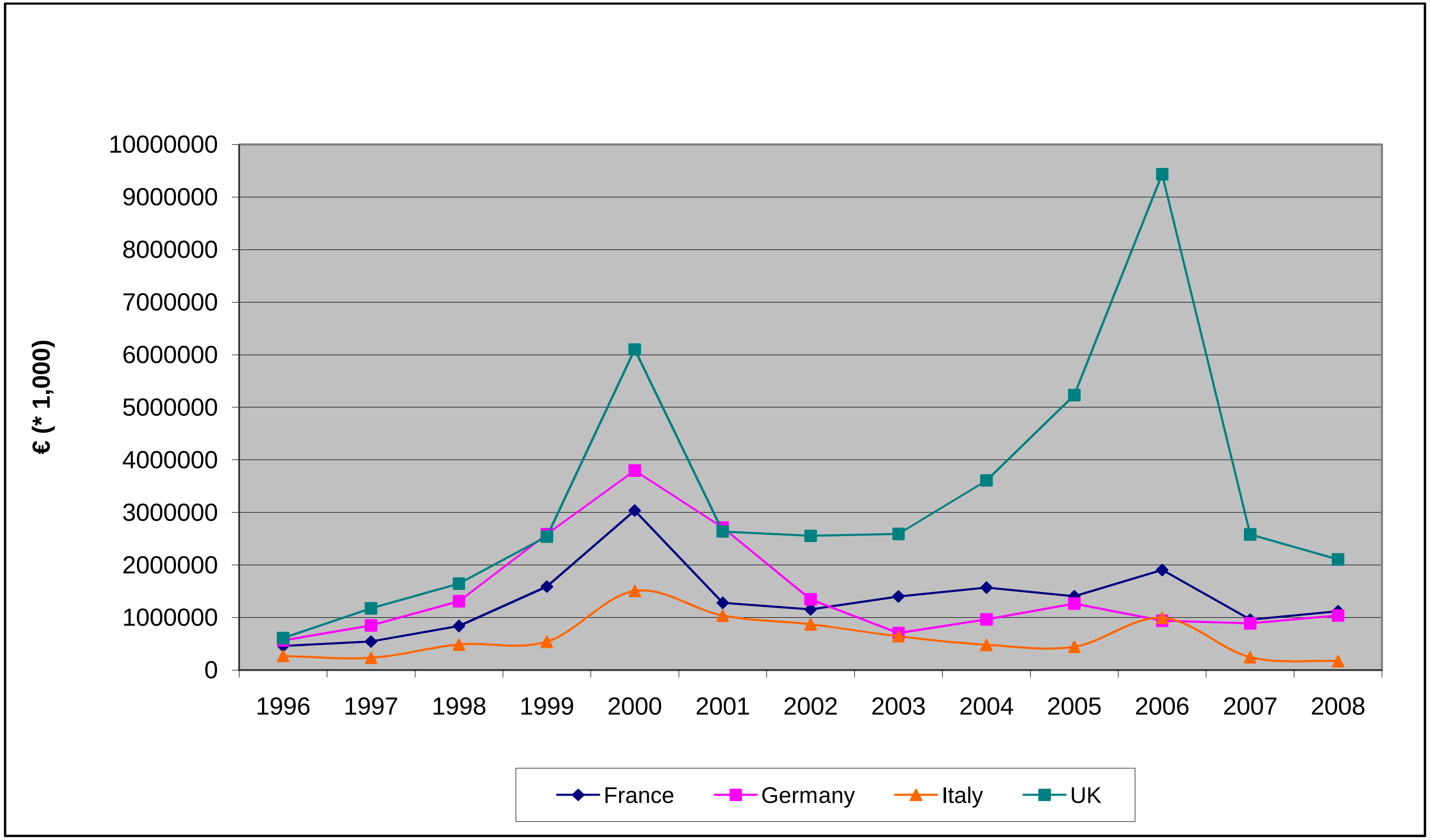


Figure 2. Venture capital investments amounts in France, Germany, Italy and the UK: 1996-2008. Source: EVCA.



- Hypothesis: VC-backed IPO under-pricing
  - *Certification hypothesis.* VC reduce info asymmetries → VC-backed IPOs less under-priced (Megginson-Weiss 1991)
  - *Grandstanding hypothesis.* VC aim to maximize market exits → VC-backed IPOs *more* under-priced (Gompers 1996)
  - Has European VC offered valuable advice? (Bottazzi, Da-Rin 2005)
    - Certification can help reduce info asymmetries
    - Coaching can boost firm growth

- Some evidence
  - UK: Certification, except during the Internet bubble (Ellul-Pagano 2006, Coakley et al. 2007, Chahine et al. 2007)
  - France: Grandstanding (Chahine et al. 2007)

- VC: coach or scout?
  - *Coach hypothesis.* VC: Superior assistance in decision-making → VC-backed grow faster
  - *Scout hypothesis.* VC: Superior sorting skills → Select TBSFs with better growth prospects → VC-backed grow faster

- Evidence supports the *scout hypothesis*
  - VC flows to firms with higher patent counts (Engel-Keilbach 2007)
  - Managerial human capital affects the probability to receive VC, but not the post-VC growth (Audretsch-Lehmann 2004, Colombo-Grilli 2009)

- <u>Corporate Venture Capital</u>
  - CVC might reduce informational asymmetries (Maula-Murray 2001, Ginsberg et al. 2005)
  - CVC might behave as superior coach (Ernst et al. 2005, Maula et al. 2005)
  - Yet TBSF have choosen to “swim with sharks” (Katila and al., 2008)

- <u>The weight of experience?</u>
  - Do European VC lack experience?
    - Example: the superiority of US contracts versus non US contracts (Kaplan, Martel, Strömberg, 2007)

- Result 1: *European venture capital has caught up with US venture capital in terms of investment amounts, but it is still doubtful whether it has provided effective advice to TBSFs*

- Open Issues
  - Study VC as an interacting process with multiple actors: young firms, incumbents, public agencies
  - Examining the functioning of the market for funds: the role of limited partners

2. The "effective" characteristics of high-tech stock markets versus actual stock exchanges

- <u>A brief history</u>
  - A wave of NASDAQ copies in the Nineties
  - Failures (Neuer Markt, Nouveau Marché, Nuovo Mercato) with the exception of AIM
    - Between 2000 and 2002: -91% capitalisation Neuer Markt, - 68% for French and Italian
    - Underperformance up to 60% in the first two years post-IPO for German and Italian NMs

    (Bottazzi and Da Rin, 2003, Goergen and al., 2004, Giudici and Roosenboom, 2004)

- <u>What lies behind the failures?</u>
  - H1: Poorly diversified markets
  - H2: Inadequacy of the institutional architecture (Revest, 2010)
  - H3: Competition among exchanges
  - H4: TBSFs low quality
    - IPO less frequent than trade sales (AIFI, Baygan 2003)
    - The Nouveau Marché: share of intangible assets out of total assets was 2.8%, against 20.8% for tangibles (Bottazzi and Da Rin, 2002)

- <u>Why does the AIM appear to be more successful?</u>
  - Diversification of the listing
  - Favorable fiscal regime
  - A “ feeder” to the main market
  - But low capitalisation compared to the Nasdaq
    - In 2007: 197 000 m$ AIM versus 4 000 000 m$ NASDAQ

- <u>What are the “effective” characteristics of high tech stock markets?</u>
  - From the TBSF’s viewpoint
    - Enter the market, Stimulate growth, Increase the firm’s value
  - From social welfare viewpoint
    - New investments, value creation, jobs creation...
  - From the market’s organization viewpoint
    - A relevant architecture to the specificities of the TBSF and to the market’s history, Attract investors
  - From the institutional viewpoint
    - Protection of investors, No conflicts between between competitive and regulation goals

- Does the AIM possess some of those features?

(Ben-Ghada, Revest, Sapio, 2010)

- Some figures…
  - Evolution of market capitalisation
    - From 82,2 millions pounds in 1995 to 56,632 millions pounds in 2009
  - Evolution of number of companies
    - From 121 in 1995 to 1293 in 2009 (december)
  - Evolution of funds raised
    - From 94,8 millions pounds in 1995 to 5511,7 millions pounds in 2009 (december)

- <u>The principle based approach</u>
  - No specific requirements for admission (Rousseau, 2007)
    - No minimum size requirements…
  - … but an key actor: the NOMAD
    - Assess the suitability of the firm for admission
    - Ensure companies comply with the AIM’s listing rules
  - Market rules replaced by the function of NOMAD
    - Gatekeeper, adviser and regulator
    - Responsability and reputation

- The firms trajectories: some preliminary results
  - Between 1995 and 2009 (Ben-Ghada, Revest, Sapio, 2010)
    - 55 transferts to the main market, 178 takeovers, 266 reverse takeovers and 105 failures
    - Transfered companies larger and younger than other companies (few very large firms)
    - High-Tech companies: 45,5% transfers, 32,6% takeovers, 25,9% reverse takeovers and 26,7% failure
    - Reverse takeovers: the quicking delisting reason: less than 3 years

– Propositions

- P1: Large and young high-tech firms are better positionned on the market
  - Larger firms are more likely to survive (Espenlaub and al. 2008).
- P2: The trajectory (transfert, takeover…) depends on the « quality « of the firm at IPO
  - Companies which enter the market through RTO are low quality and poor performer (Arellano-Ostoa and Brusco, 2002, Gleason and al., 2005, Adjei and al. 2008).
- P3: Being a feeder is not the main function of the market regarding the importance of takeovers

- <u>Result 2</u>:
  - *European stock exchanges dedicated to high-technology companies have failed to deliver support to TBSF during the nineties*
  - The AIM is more a market for control than a feeder

- <u>*Open Issues*</u>
  - The future of the AIM and the regulatory dimension
  - The nature and role of investors

3. Conclusion

- The finance gap for TBSFs located in Germany, France, Italy and UK is not just a problem of money
  - Financial intermediaries and markets lack expertise for support and valuation of TBSFs
  - Informational opacity creates perverse incentives (VC biased towards speculation, fraudulent companies go public, conflicts of interest)

- Are financial intermediaries “real” intermediaries between industry and finance or do they play mostly other games than the intermediation’s game?