

# Equity gaps in UK innovation

1

**DR. ROBERT CRESSY**  
**PROFESSOR OF FINANCE, ENTREPRENEURSHIP**  
**AND INNOVATION**  
**BIRMINGHAM BUSINESS SCHOOL**

# Equity gap defined

2

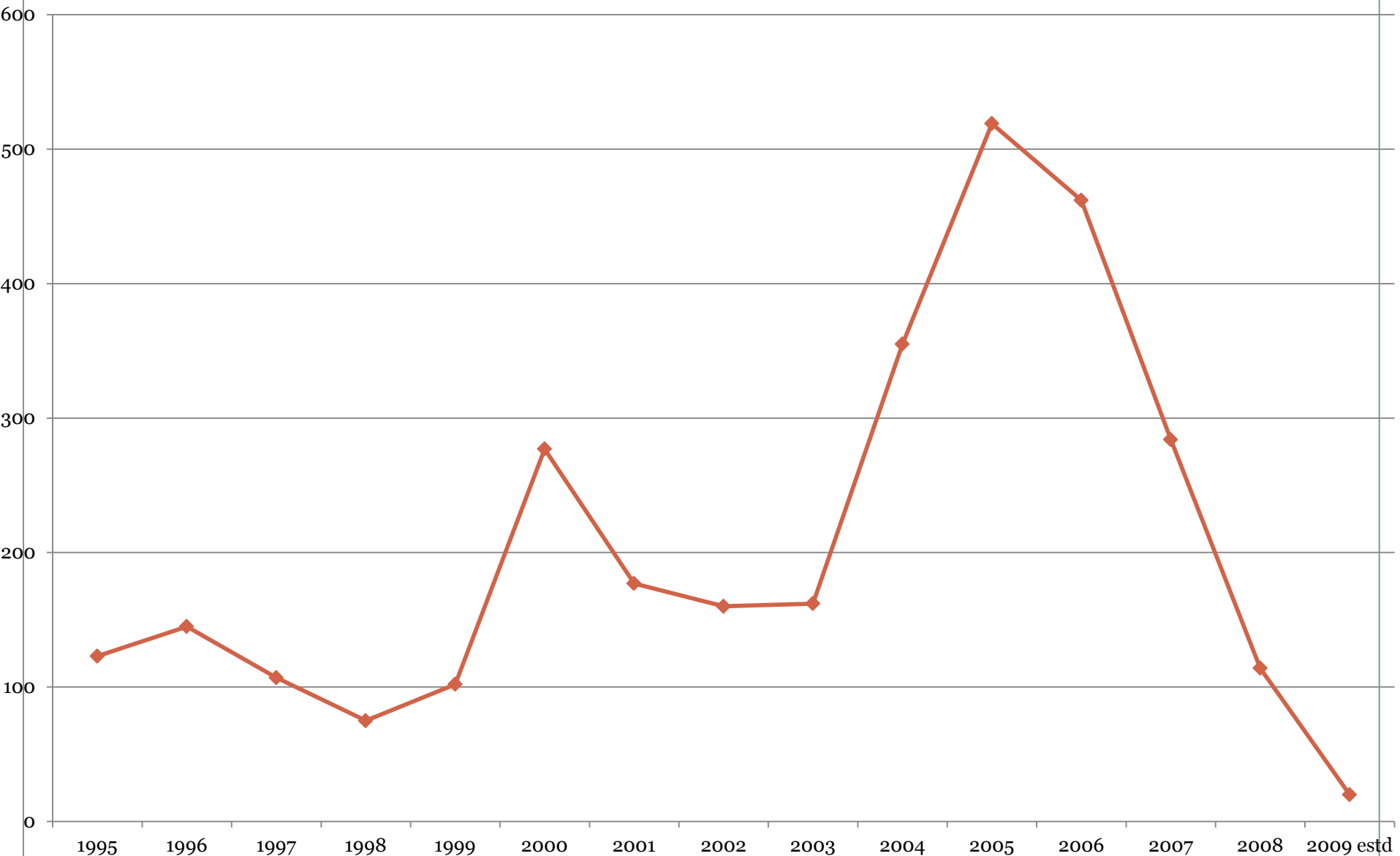
- An equity gap exists when the Social Net Rate of Return on a project requiring equity finance is positive but the Private Net Rate of Return is negative

# Evidence for an equity gap: the AIM market

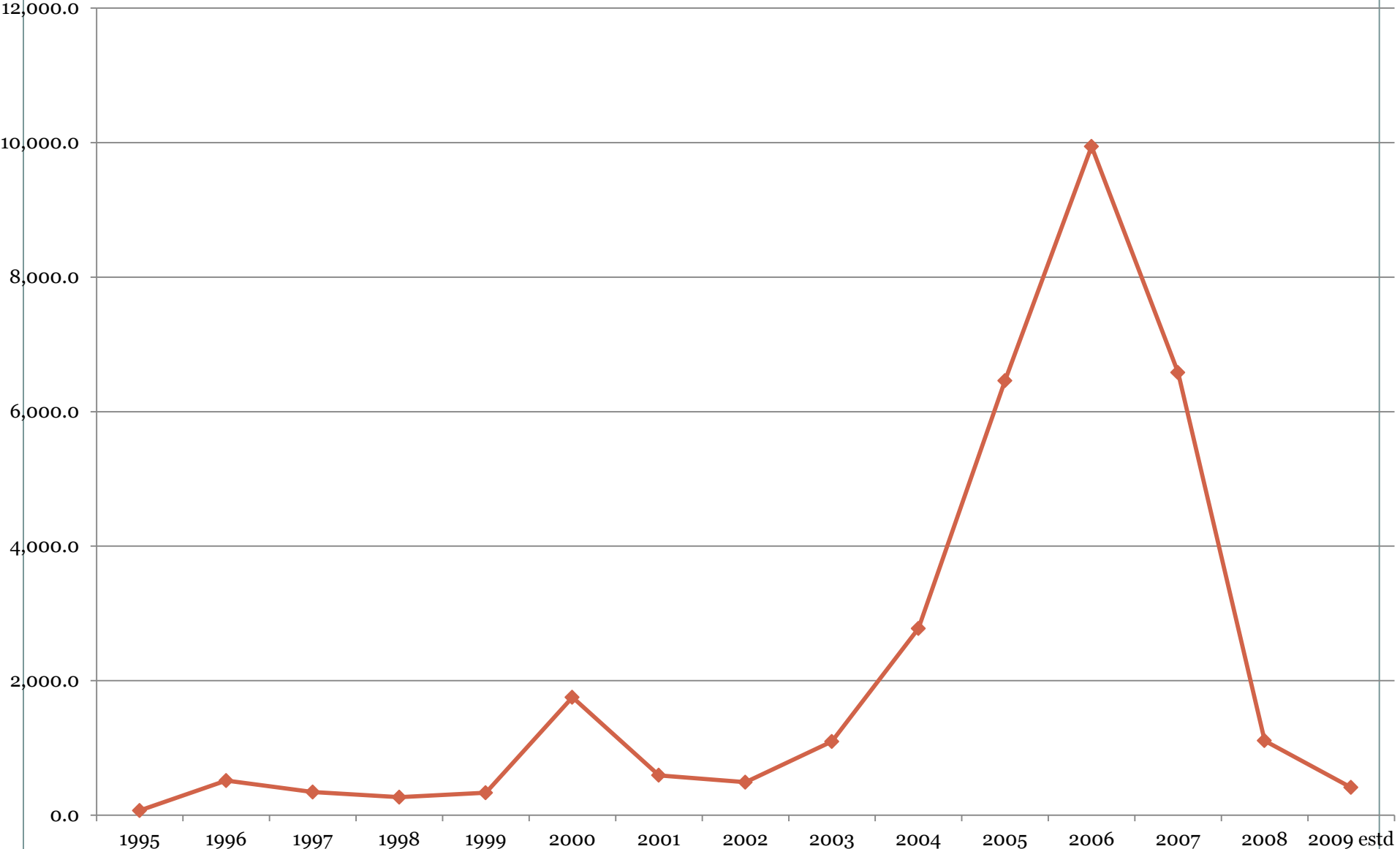
3

- Admissions: down
- New money raised: down
- Follow-on funding: down
- Average share price: down
- Liquidity (turnover): down
- Size of company (market cap): down
- Cost of capital: Up

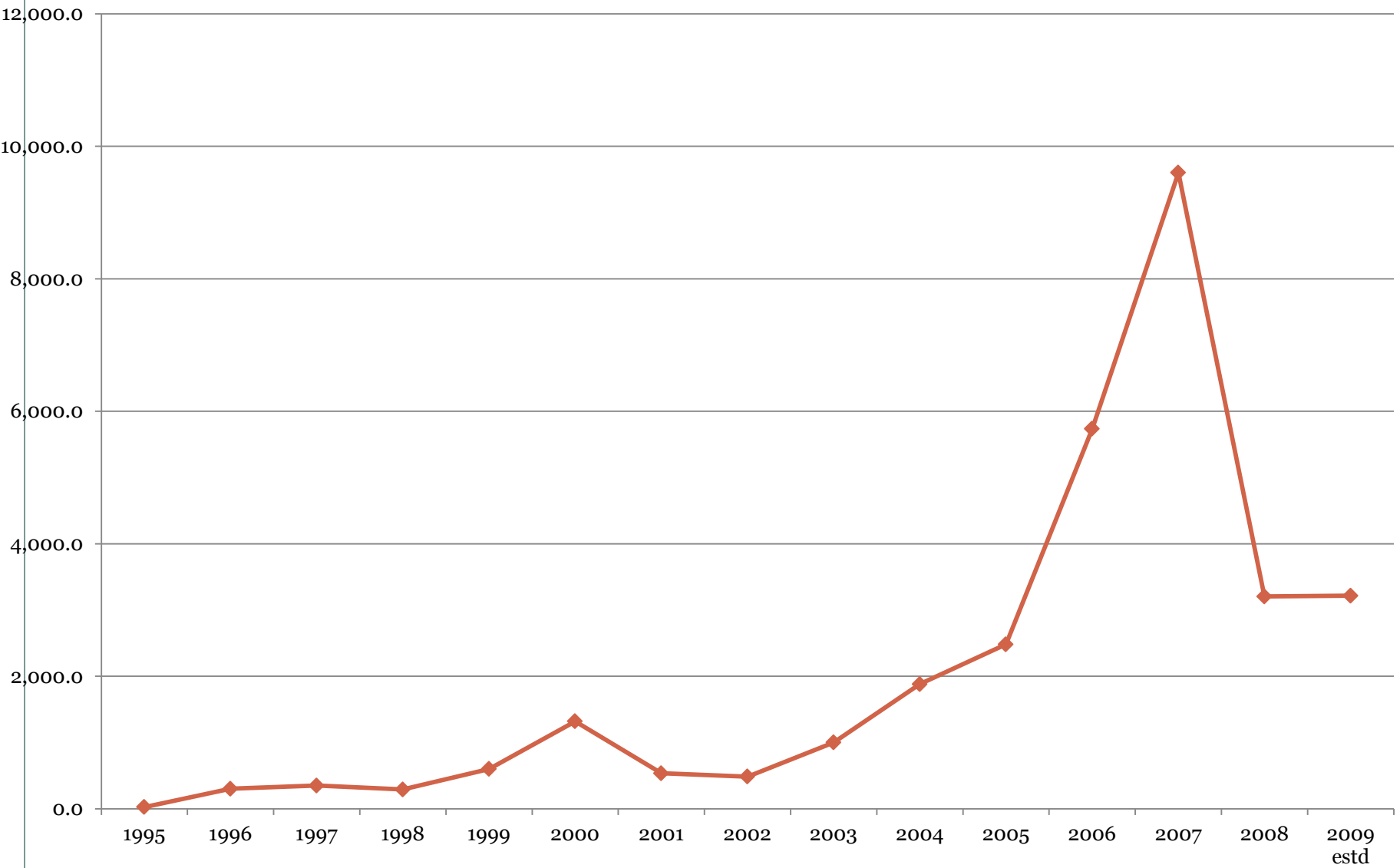
## AIM: Admissions (numbers), 1995-2009



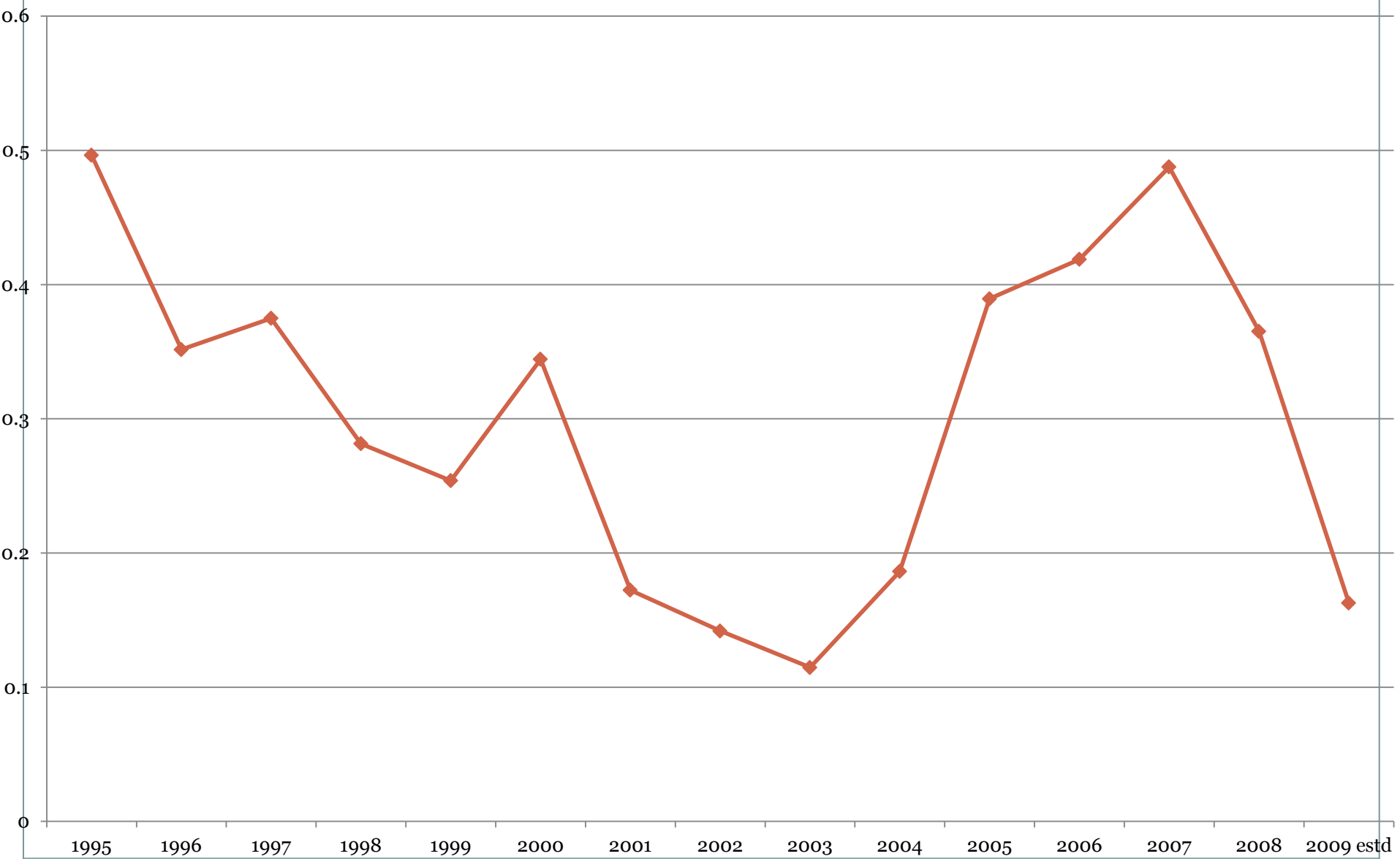
# AIM: New money raised (£m)



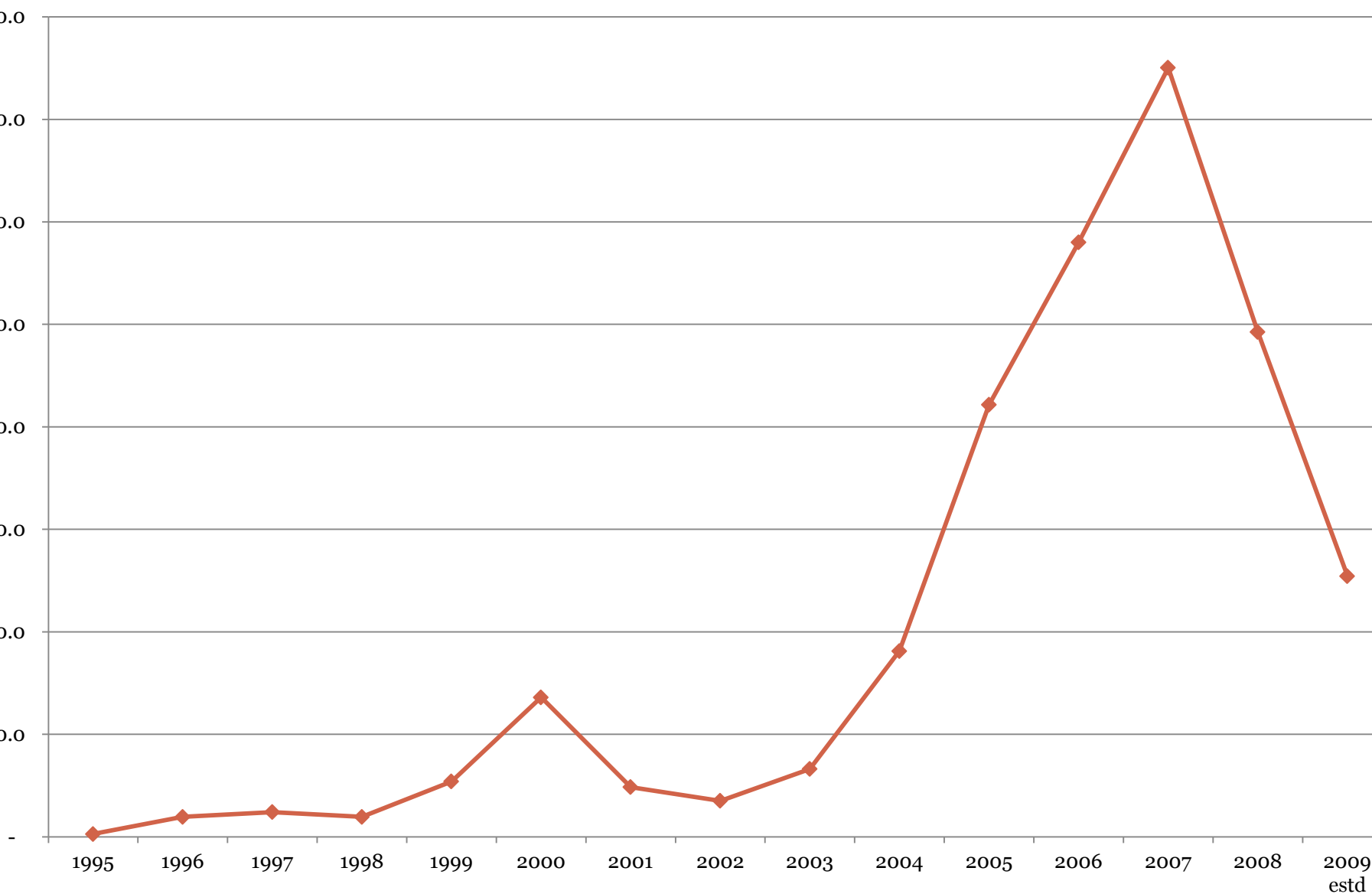
# AIM: Follow-on funding,



## AIM: average price per share

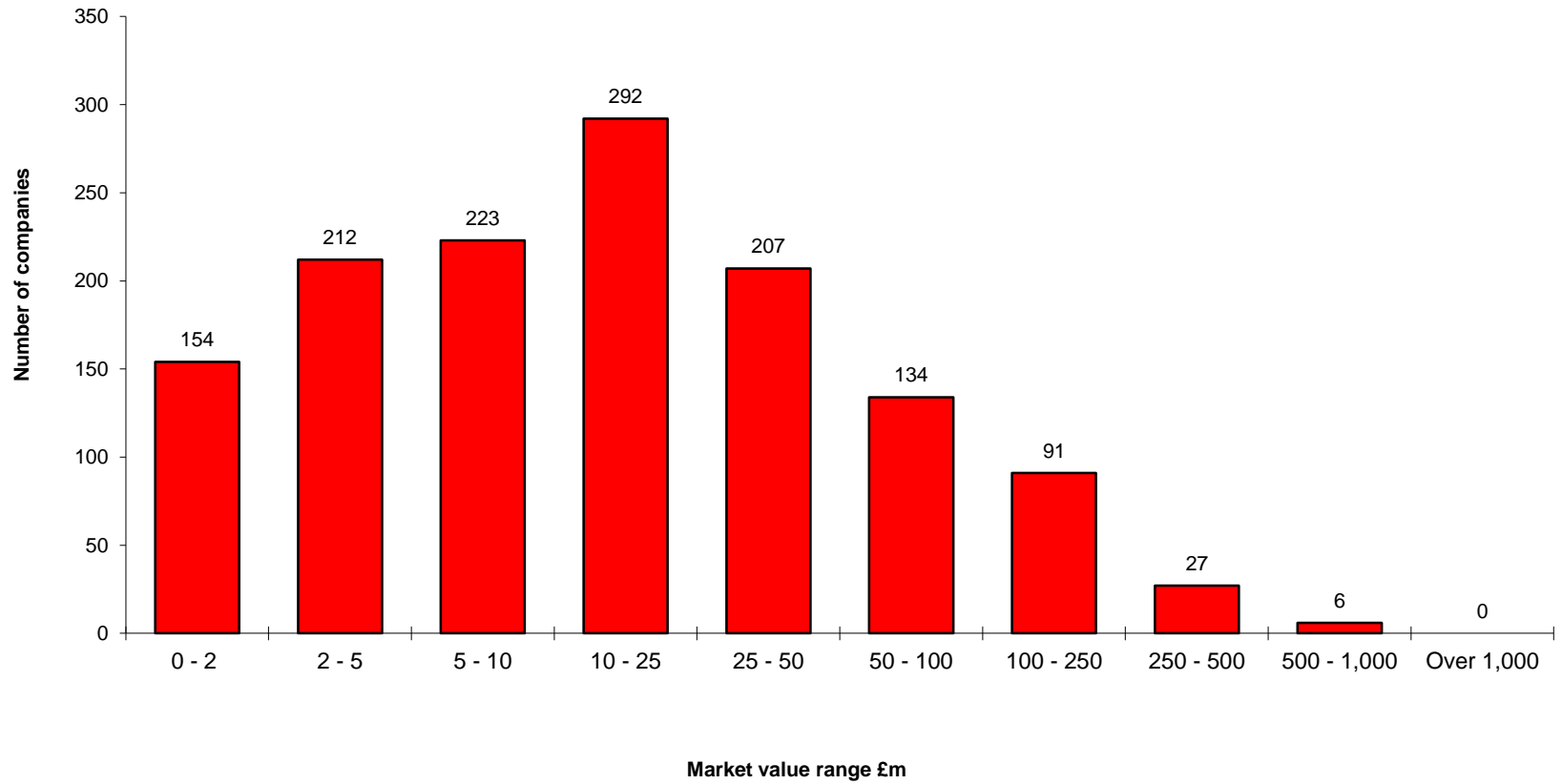


## AIM: Turnover value £m





AIM: Distribution of companies by equity market value, 2009



# Case study: Biotech

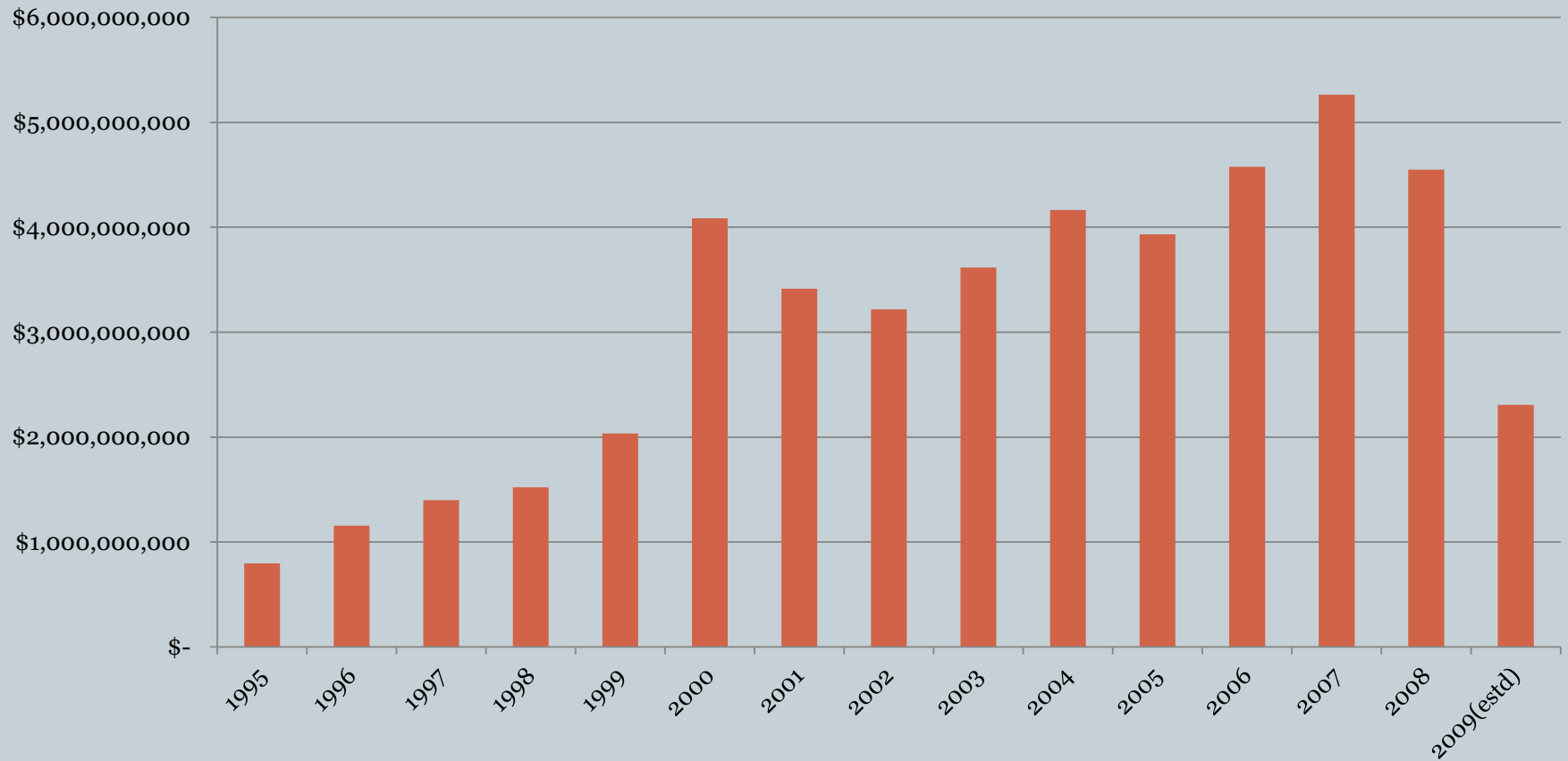
10

- Consider the (extreme) case of Biotechnology
  - These businesses largely rely on outside equity
  - They are engaged mainly in R&D and have no products for years
  - Debt finance is therefore an impossibility for most of them
  - On average
    - ✦ Need continuous injections of outside (VC) equity for the first 5 years
    - ✦ Follow-on investments are crucial to survival of the better firms
    - ✦ This is just not happening

# VC investment in Biotech: the US

11

## US Venture capital investment in Biotechnology



# UK Biotech: starved of funds

12

- The decline in US biotech investment since 2007 is very worrying
  - It is now (2009) less than 40% of its value in that year
- In the UK a recent survey by the Biotech Industry Association revealed that
  - Most companies were small and young
  - A high proportion are startups
  - Hence these companies are *highly vulnerable* to cessation of funding

# Demand for equity

13

- Half of the UK biotech companies had tried to obtain equity finance in the last year
  - 2/3 of them wanted this for such mundane things as working capital/cash flow
  - Whilst 3/4 wanted this for
    - ✦ Generating Intellectual Property, or IP (via R&D)
    - ✦ Protecting IP (via patents)
  - Only 1/4 wanted this for Marketing purposes
- Serious capital constraints exist:
  - Almost 2/3 of companies were either
    - ✦ unable to raise funds at all in the last year
  - Or
    - ✦ got less than they asked for

- Reasons offered by VCs:
  - Business or sector 'too risky' (1/3 businesses each)
  - Only 4% were turned down because they asked for 'too much money'
- Debt and equity were poor substitutes for these businesses (especially the startups)
  - Less than 1/3 sought debt finance when turned down for equity
  - In other words, 2/3 did not bother with debt

# Worsening situation

15

- The preponderance of firms (77% ) said that it was harder to get finance than in the previous year
- A large majority (2/3) said it was ‘significantly’ harder to do so

# Consequences

16

- 1/5 of businesses had to drop development plans completely
- 1/3 were able to defer plans
- 1/3 had to reduce staff
- 1/10 had to substitute debt finance
- If this situation persists many of these companies will fail.
  - Be ready for a shakeout that will take the good as well as the bad



# Conclusions

17

- Equity gaps in the UK high technology sector are alive, well and growing
- The statistics for the AIM market indicate that there is for VCs a problem of
  - increased delistings (for the wrong reasons),
  - falling valuations,
  - higher cost of capital,
  - lower liquidity
  - little chance of an IPO
- VCs are therefore loathe to invest in technology companies
- High tech sectors (with Biotech as an extreme case) rely on venture capital to survive and expand
  - With no funds available from the institutions VCs cannot invest
  - The British biotech industry may disappear unless this problem is addressed
  - Recent government proposals may mitigate this problem
    - ✦ Fund of funds