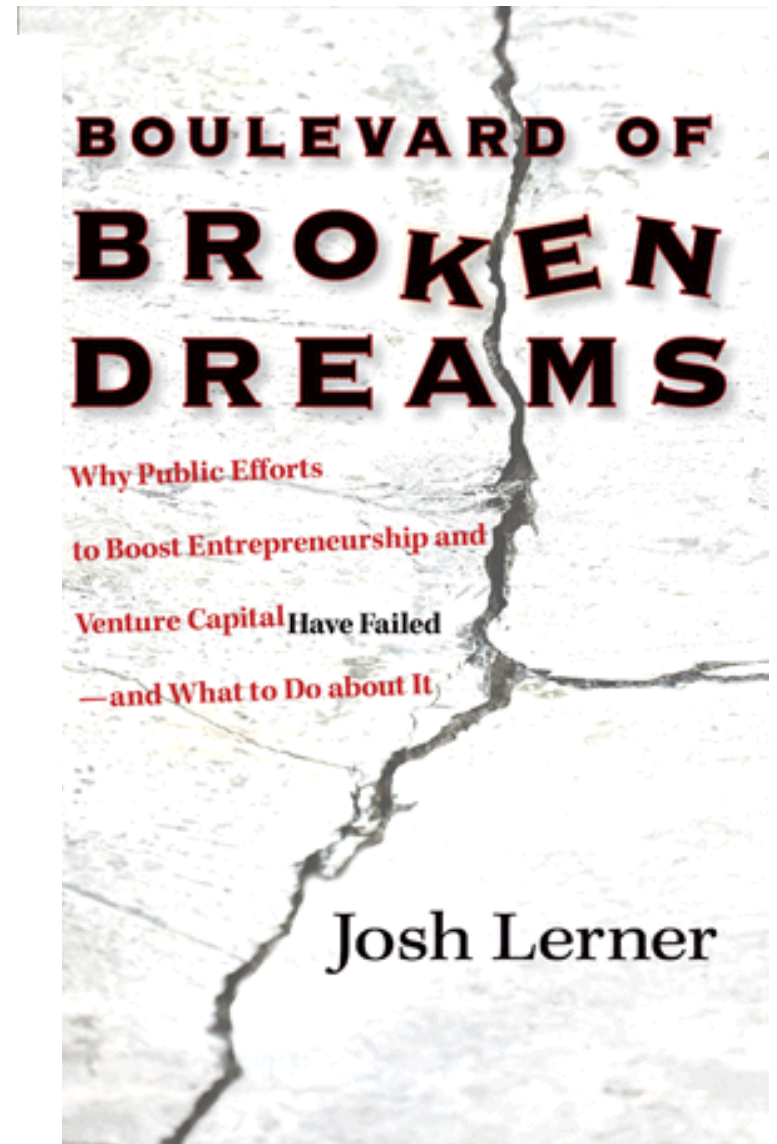




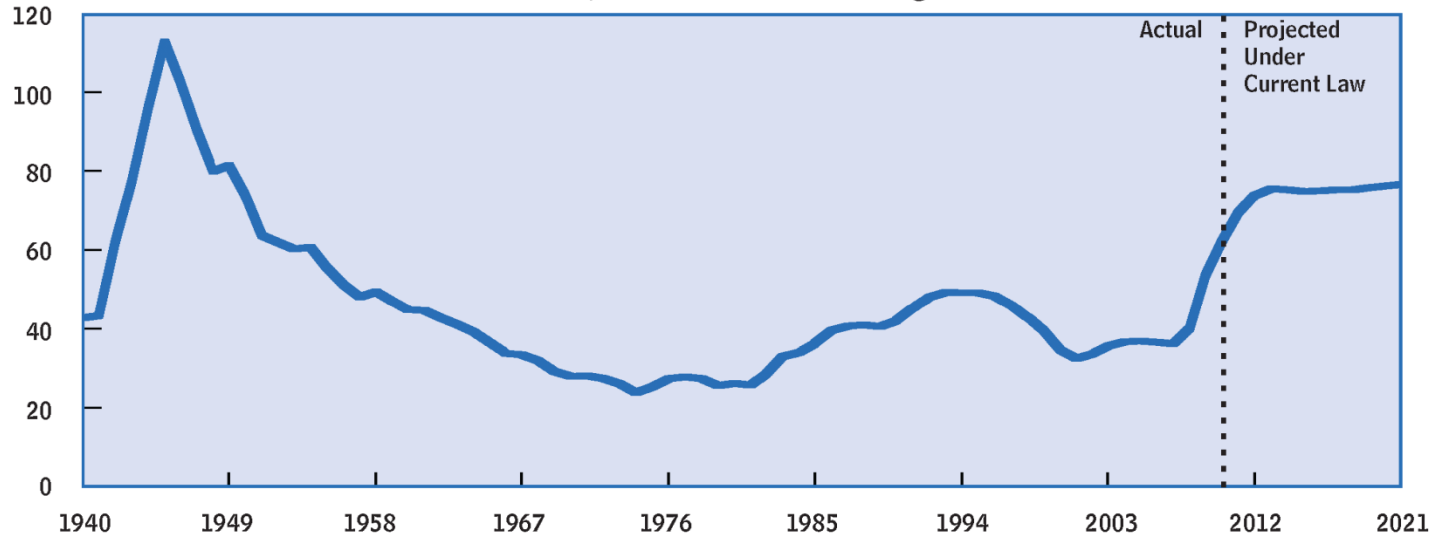
GOVERNMENT AND THE PROMOTION OF ENTREPRENEURSHIP AND VENTURE CAPITAL

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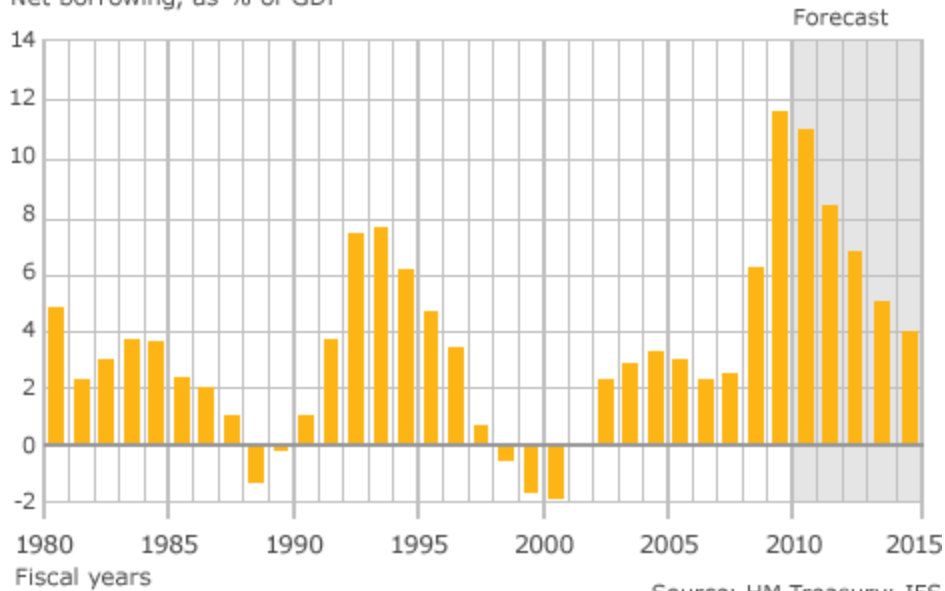


Debt Held by the Public (Percentage of GDP)



UK budget deficits

Net borrowing, as % of GDP



Source: CBO

Source: HM Treasury; IFS



AND IN EMERGING ECONOMIES...



DESPERATE NEED FOR “GREEN SHOOTS”

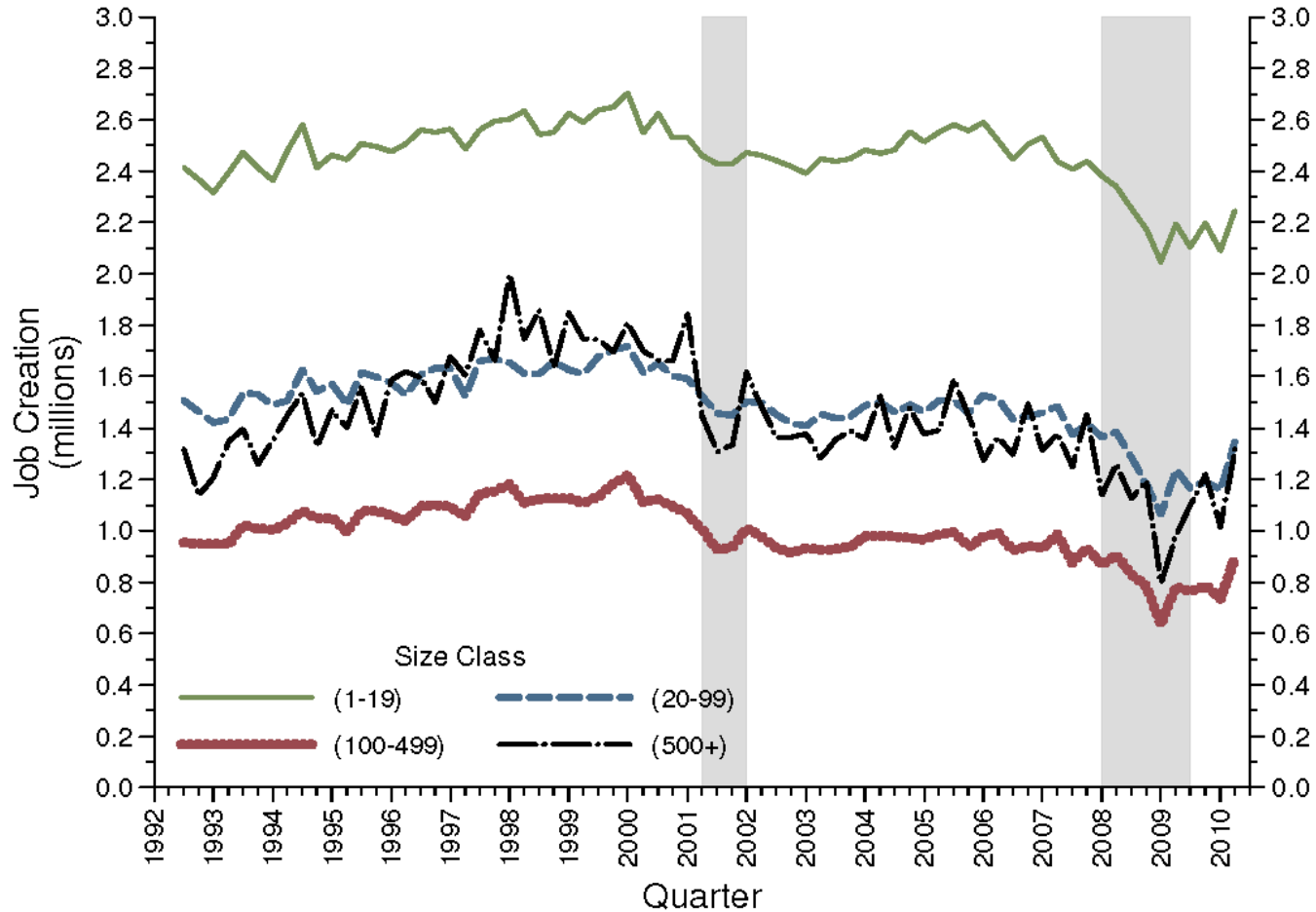


BUT ENTREPRENEURSHIP GROWTH ENGINES SPUTTERING

- Hard to see conclusively but...
 - Declining job creation from small firms.
 - Poor venture returns since 2000 boom.
 - Even more pronounced drought elsewhere.
 - Linked to difficulties in exiting investments.
 - Downturn in venture activity world-wide since crisis.
- Concerns of wide-spread disillusionment of investors.

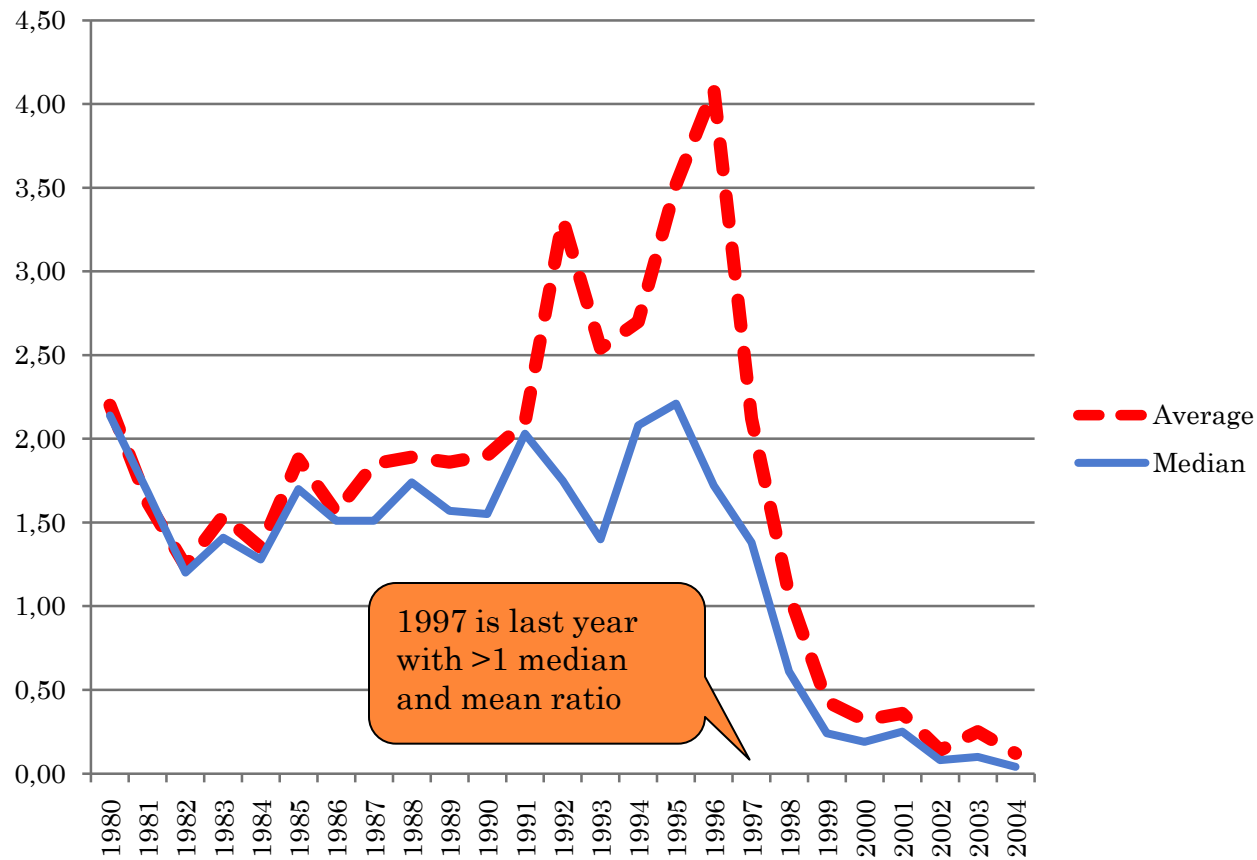


U.S. JOB CREATION AND FIRM SIZE



Source: Haltiwanger, et al. [2011]

DISTRIBUTED/PAID-IN CAPITAL, BY VINTAGE YEAR, U.S. VC FUNDS



Source: Thomson/Reuters. Data as of 12/31/10.

RETURNS BEFORE AND AFTER

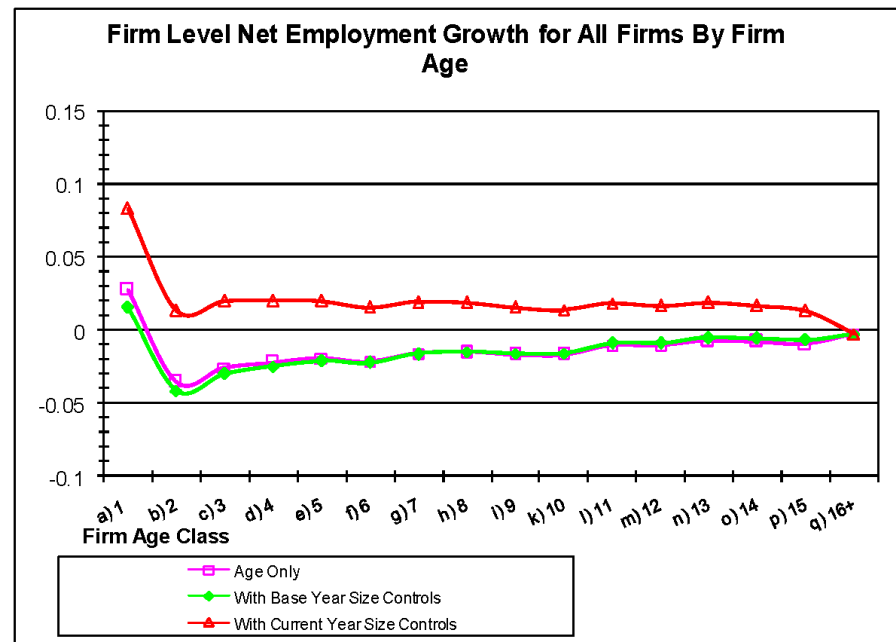
	Vintage Years: 1990-98	Vintage Years: 1999-2005
U.S.	37%	0%
Europe	8%	-5%

Source: Thomson/Reuters. Data as of 12/31/10.
Numbers are capital-weighted average IRRs,



IMPORTANCE FAR BEYOND SIZE

- Haltiwanger and co-authors look at job creation in U.S.:
 - Once carefully control, small firms have little advantage in new job creation,
 - But huge advantage for young firms:
 - Essentially all growth from firms <3 years old.



Source: Haltiwanger, et al. [2010]

IMPORTANCE FAR BEYOND SIZE (2)

- Acs and Audretsch [1988] look at 100s of key innovations in second half of 20th century:
 - Small firms contribute disproportion share of major innovations.
 - Contribution was greatest in immature industries which were relatively unconcentrated.
 - Consistent with models of technological competition (Reinganum [1989]).



WHAT ANALYSES TELL US

- Kortum and Lerner [2000] look at relationship between venture capital and innovation:
 - Look at evidence across 20 industries, using patenting and other proxies for innovation:
 - Also control for corporate R&D, *etc.*
 - Venture capital appears ~3 to 4 times more powerful than corporate R&D.
 - Even after control for causality concerns.
 - From late 70s to mid-90s, VC was only 3% of corporate R&D, but responsible for ~10%-12% of privately funded innovations.



WHY A GOVERNMENT ROLE?

- Increasing returns to scale
 - Much easier to do 100th deal than the first:
 - Knowledge and expectations of entrepreneurs.
 - Familiarity of intermediaries.
 - Sharing of information among peers.
 - Comfort level of institutional investors.
- Economists term these “externalities.”
- In these cases, government can frequently play a catalytic role.



ILLUSTRATIONS FROM HISTORY

- In the U.S.:
 - Critical role of SBIC program.
 - Established in 1958.
 - Many early VC firms started as SBIC awardees, then opted out.
 - Building critical “infrastructure”: Lawyers, data providers, *etc.*
- Similar insights from Israel, Singapore, *etc.*
 - Suggests that some of funding should be directed to growing industries!



BUT TWO FUNDAMENTAL PROBLEMS

- Incompetence:
 - Often, relatively little familiarity with worlds of entrepreneurship and venture capital.
 - Many well-intentioned efforts are poorly executed.
- “Capture”:
 - Public efforts can be directed to well-connected parties, who seek to benefit themselves.



THE RMB FUND INITIATIVE

- Chinese government introduces domestic fund structure in effort to boost industry.
 - Differentiated in terms of capital sources, investment types, and practices.
- Consequences:
 - Surge in fundraising by inexperienced funds:
 - Intensifies overheating of the market.
 - Among established funds, wedge between foreign and local investors:
 - Greatly intensifies management challenges.



THE IOWA MISADVENTURE

- Sought to encourage venture activity in early 1990s by earmarking part of state pension fund.
- Issued RFP for local fund and waited for responses:
 - Ended up selecting lightly-regarded group with no experience in region.
- Despite hefty management fees, fund had hard time finding deals.
- State sought to terminate fund:
 - VCs ended up suing state for fees and profits would have made, could they find deals!



THREE KEY PRINCIPLES

- Making sure table is set.
- Ensuring effective design by listening to the market through matching fund requirements.
- Avoiding self-defeating design errors.



“STAGE SETTING”

- Ensuring *high potential* entrepreneurship is attractive:
 - Tax regime:
 - Studies suggest critical role of capital gains vs. income effective tax rate differential.
 - Easing formal and informal sanctions on involvement in failed ventures.
 - Singapore’s Phoenix award.
 - Easing barriers to technology transfer.
 - Entrepreneurship education for students and professionals alike.



UNDERSTANDING THE MARKET

- Need to listen to market's dictates:
 - Temptation to jump into popular areas.
 - Universal temptation to “share the wealth”:
 - Spreading funds out.
 - Matching funds most appropriate way to ensure.



THE SPECIAL CHALLENGE OF EMERGING ECONOMIES

- Cannot expect groups to appear “out of thin air.”
- Rather, must nurture and work closely with groups.
- Potential sources for these groups:
 - Angels or ex-entrepreneurs.
 - Later-stage investors.
 - Corporate business development units.
 - Combinations of overseas investors and local players.
- Likely to require in many cases real work:
 - Importance of leadership from public side:
 - Mentoring and skills development.
 - Evaluation criteria:
 - Commitment.
 - Credibility and connections.
 - Diversity of team skills.
 - Preliminary track record.



GETTING DETAILS RIGHT

- Appropriate sizing:
 - Too small may not make a difference.
 - Too big may flood local investor.
- Avoiding rules that go against what market needs.
- Need to ensure incentives to ensure participants do well if meet goals.
- Allowing to programs to evolve and adjust over time.
- Evaluation of managers and program itself.



FINAL THOUGHTS

- The critical rationale...
 - And the many pitfalls.
- Three key points:
 - More than money is needed: entrepreneurship is not in a vacuum.
 - The virtues of market guidance.
 - Getting details right important as well.
- Need for patience!



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