

# The Changing Role of Universities in Entrepreneurship

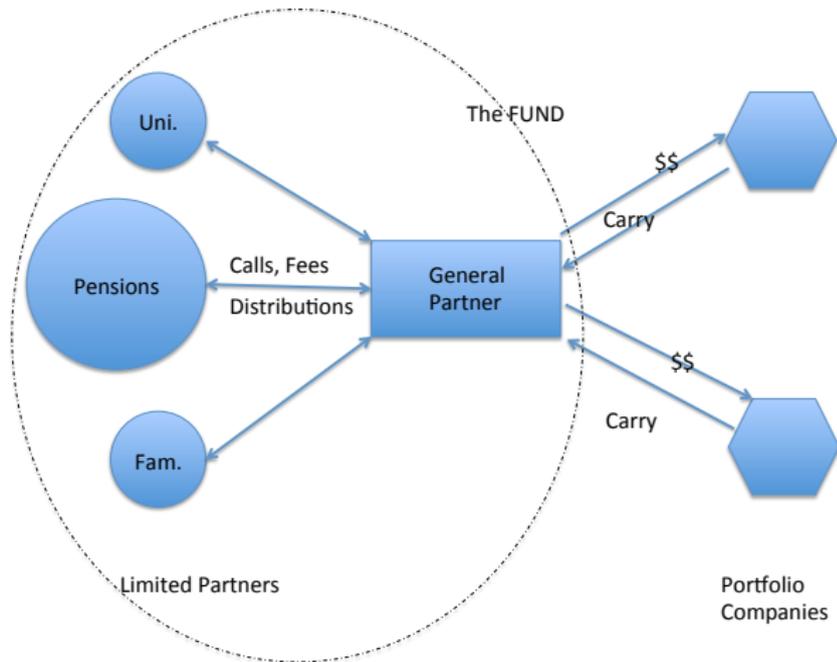
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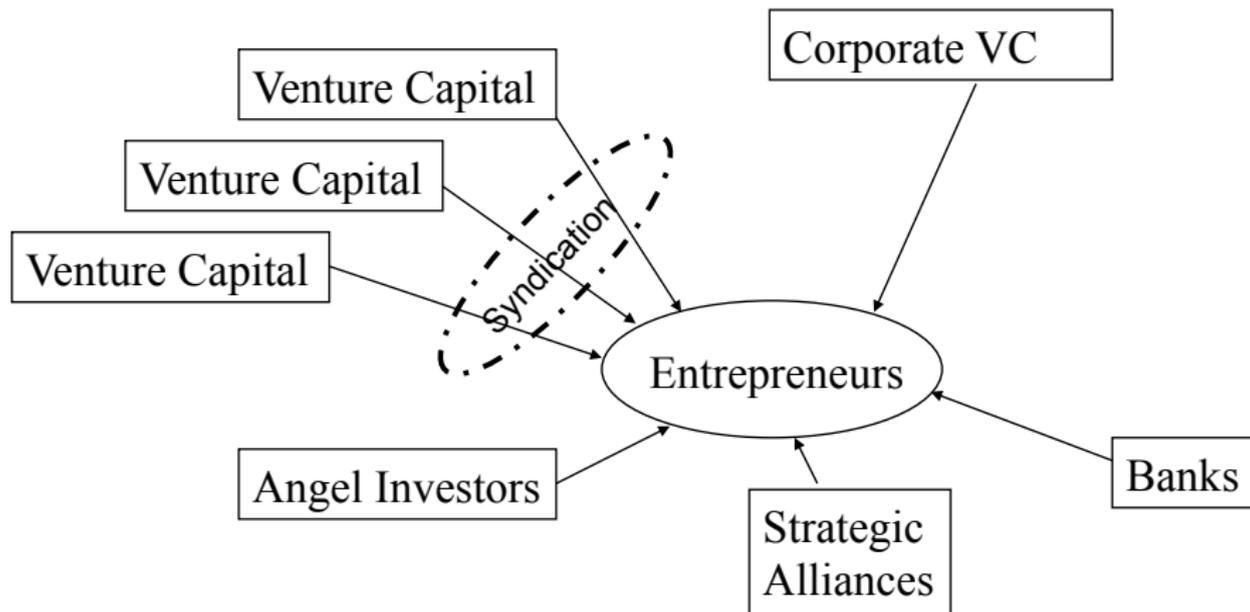
# Entrepreneurial Finance 1.0

Beginning circa 1989



# Entrepreneurial Finance 2.0

Beginning circa 2001



## My Question Tonight

Where do universities fit into this picture?

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- **Version 1.0:** We trained scientists that companies hired; MBAs that managed these companies.
- **Version 2.0:** Our labs became innovation factories. (Enter the modern VC.)

My claim: we have entered a brave new world. A version 3.0.

- This owes in part to changes in the funding landscape for entrepreneurs, but also to changes in the fundamental value proposition of universities themselves.

## Three hats

- Professor of Finance:
  - ▶ Teach VC/PE or Entrepreneurial Finance to around 400 students a year for the last 15 years. (30-35%)
- The Innovation and Entrepreneurship Initiative:
  - ▶ A campus-wide initiative aimed at boosting/leveraging Duke's "EQ"
- NBER Entrepreneurship Research Boot Camp:
  - ▶ Train PhD students from across the US who want their academic careers to focus on questions in innovation and entrepreneurship. Sponsored by the Kauffman Foundation.

# The Innovation and Entrepreneurship Initiative

- Teaching

- ▶ Certificate Programs for Undergrads
- ▶ Certificate Programs for Graduate Students in Arts and Sciences
- ▶ Short-courses

- Research

- ▶ Interdisciplinary research across business, law, and economics aimed at understanding the science of commercialization

- Outreach

- ▶ Mentoring
- ▶ Investing
- ▶ Developing

## We Are Not Alone

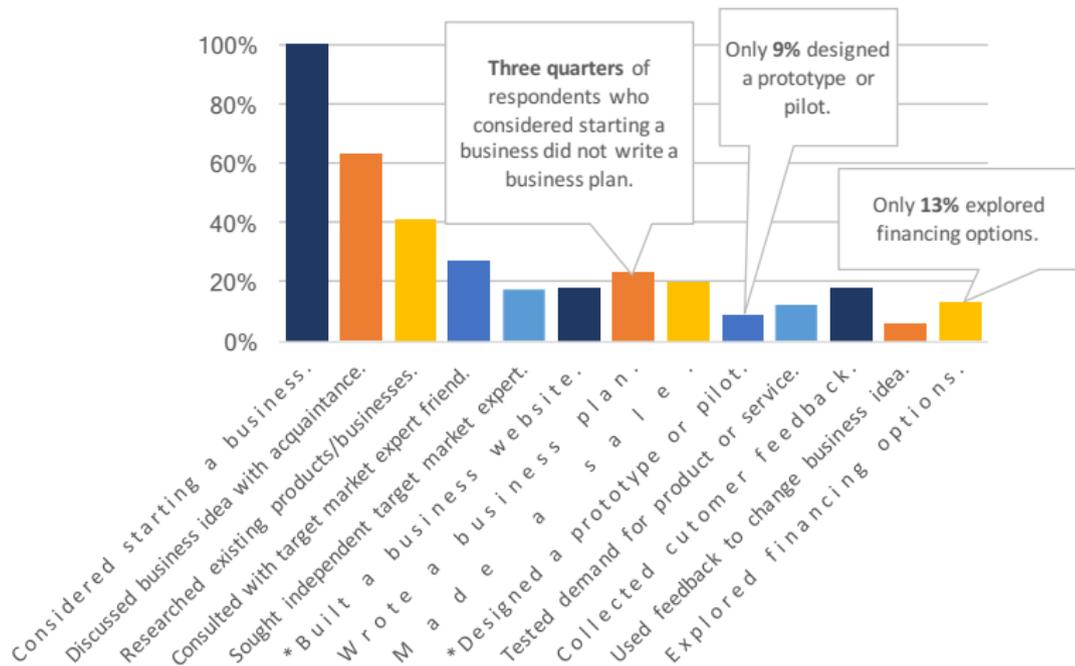
This is NOT a sales pitch for Duke! This is happening everywhere:

- Edward Kaplan '71 New Venture Challenge at Chicago Booth
- U. of Toronto's Creative Destruction Lab
- Stanford's Launchpad at the Design Lab
- Georgia Tech's TI:GER Program
- MIT delta v Accelerator

and many others...

# This is not just a fad

## Reason #1: Mentoring



## This is not just a fad

### Reason #2: Agency

As (ChicagoBooth's!) Steve Kaplan and Per Strömberg have pointed out, there are four basic types of agency problems can arise in VC contracting

- Incomplete contracts leave scope for disagreement.
- Entrepreneur can hold up VCs by threatening to leave at a critical point.
- Entrepreneur either doesn't work hard or (more likely the case) works on the wrong stuff.
- Entrepreneurs differ in quality.

VCS spend massive resources solving these problems. The social bonds formed through common alumni allegiance, as well as the knowledge flows these bonds give universities a big advantage solving these problems. (Relational Contracts.)

# This is not just a fad

Reason #3: Liquidity

Universities are the ultimate long-term investors:

- Oxford: 1249 AD (but teaching started in 912 AD). Harvard: 1636. The College of William and Mary: 1693.
- We measure success at the generational level, at the “number of Nobel prizes” level.
- We are good at pooling together like-minded investors.

Two observations from this:

- 1 David Swenson has to help make payroll at Yale. Taking common equity and warrants in university-founded spin-outs doesn't create the same cash-flow problems.
- 2 We can out-angel the best angel investors.

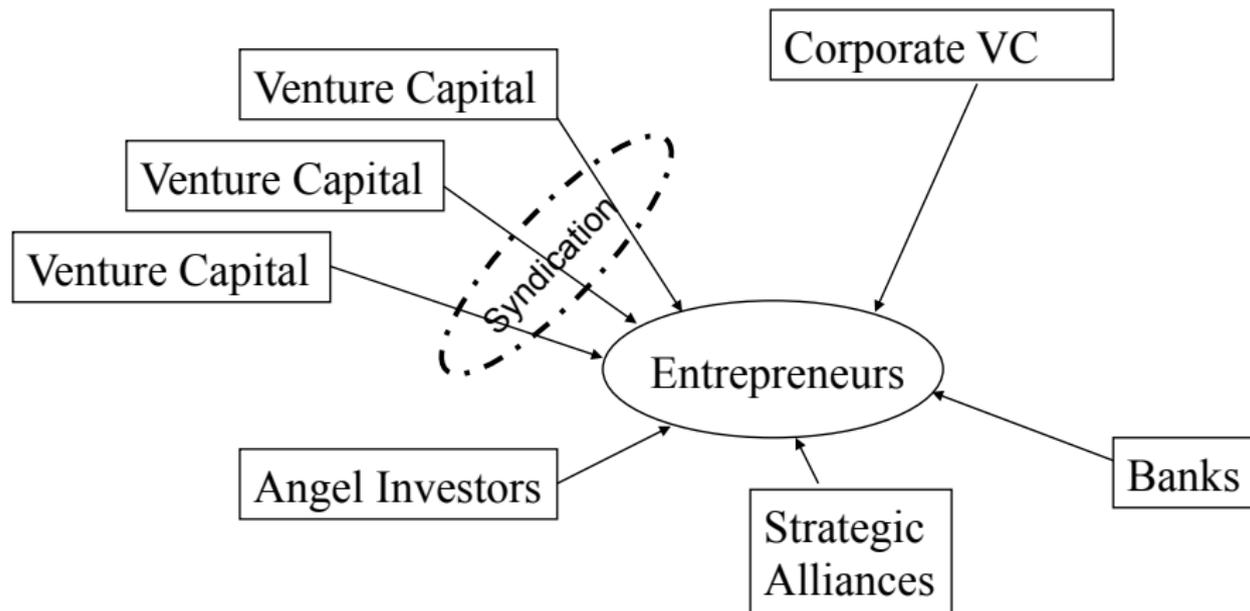
# This is not just a fad

## Reason #4: Adaptation

- Supply:
  - ▶ We used to create ideas that went into books. The books went onto shelves in libraries. They maybe got read. People built new things and thought new things as a result.
  - ▶ People consume innovative ideas differently now. The academic innovation supply-chain has to change.
  
- Demand:
  - ▶ The NSF and the NIH are increasingly aware that most science PhDs don't end up doing science in the academy.
  - ▶ The right tail of the income distribution is disproportionately the domain of the self-employed. Entrepreneurial successes are well known for giving back. (The whole angel market is a testament.)

## To Conclude

Where Do Universities Fit in This Picture?



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### The Ultimate Incubator

Universities are Incubators on Steroids:

- We supply ideas.
- We supply entrepreneurs.
- We supply eager, risk-taking young people to work in startups.
- We supply patient, professional capital.

Our unique role on both sides of the matching process means we are potentially much less exposed to the types of agency problems that plague early-stage investing. (We have our own set of problems. . . )

## To Conclude

### What This Means for You

For practitioners:

- Not just a source of expertise.
- Or a supplier of talent.
- Increasingly a source of capital.

For a crowd like ChicagoBooth alums, this is a story with a happy ending. But I think it's fair to ask if this won't become yet another source of elitism, for better or worse.