

Are They All Like Bill, Mark, and Steve? The Education Premium for Entrepreneurs

Discussion by Isaac Hacamo
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CSEF-EIEF-SITE
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Overview

- **Question:** What is the evolution of the education (postgraduate vs college vs high school) premium of U.S. Entrepreneurs?
- **Entrepreneurship Premium:** is measured with labor income, dividends, and realized capital gains upon selling in excess of the income if invested capital in financial markets and human capital in the labor market.
- **Findings:**
 - Premium of college vs high school degree has increased similarly to the premium of workers.
 - Premium for postgraduate education relative to college education has increased substantially more for entrepreneurs than for workers.
- **Channel:** More “advanced skills” associated with higher education have become increasingly important for running successful businesses.

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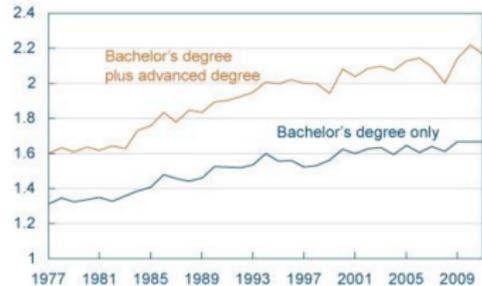
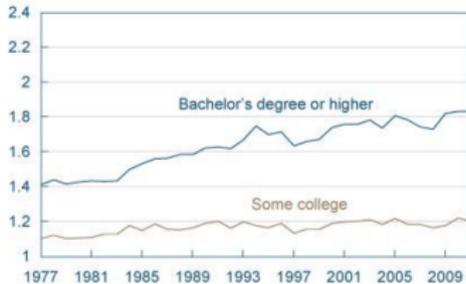
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Figure 1. Wage Premiums for College

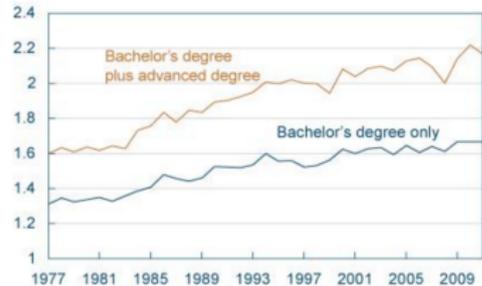
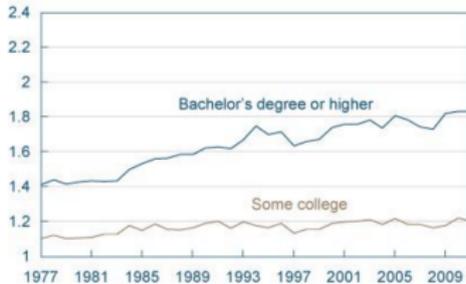


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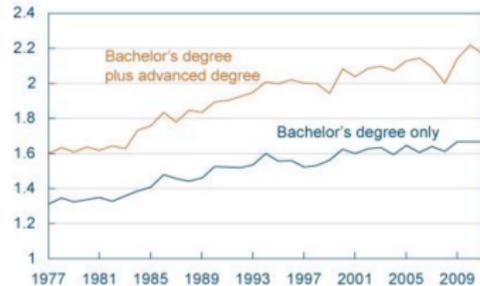
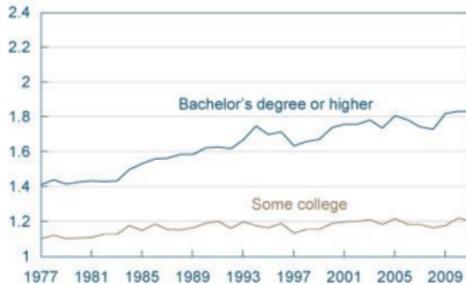


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Comment 1: Sample and Definition of Entrepreneurs

Data: Survey of Consumer Finances (SCF). Cross-sections in 1989, 1992, 1995, 1998, 2001, 2004, 2007, 2010, and 2013. Only head of households.

- Size of SCF: 4,000 households
- Number of Entrepreneurs ($\sim 7\%$): ~ 280 per year
- College ($\sim 30\%$): ~ 84 Entrepreneurs per year
- Post Graduation ($\sim 20\%$): ~ 56 Entrepreneurs per year

Concerns:

- Is this sample representative of the U.S. entrepreneurs (by education group)?
- How good is the estimation of dividends, capital gains, successful exit, failure?

Suggestion: Find (indirect) verifications that this sample of entrepreneurs representative of the U.S. entrepreneurs by education group. Distributions of demographics, i.e. age, initial wealth?

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Concern 2: 'Different' types of entrepreneurs are bundled together:

- Founders of employer-firms
- Self-employment: consultants, lawyers, architects, and doctors.
- Sales managers, marketing managers, and other managers who work for young start-ups and receive stock-options as part of their pay.

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Comment 2: Entrepreneurial Premium/Risk

Entrepreneurial premium:

$$\hat{\theta} = \underbrace{dh + lh}_{\text{labor+dividends}} + \underbrace{\frac{M - k}{E_n(a)}}_{\text{capital gains}} - \underbrace{[R(t - a, t)^{\frac{1}{a}} - 1]k}_{\text{opportunity cost}}$$

From the average parameters reported in Table 2:

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Entrepreneurship is risky!

“Even if our measure for entrepreneurial returns does not control for risk, we think that risk-aversion alone cannot explain the rising premium to higher education observed in the data. This is because we find that the entire distribution of returns has generally become more favorable to highly educated entrepreneurs: failures rates of entrepreneurial ventures have evolved similarly across educational groups while the skill premium to entrepreneurship has increased at all the higher quantiles of the entrepreneurs’ income distribution.”

At least two sources of risk:

- Income risk
- Failure risk

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Comment 2: Income Risk

- Income risk is not taken into account.
- Table 1 of the paper provides cross-sectional variation in income for entrepreneurs:

	Mean	p10	p25	p50	p75	p90
Labor Income	46.37	0	0	0	51.95	130
Dividends	73.17	0	0	11.23	53.51	153.94

- Suggestion: Use longitudinal panel to estimate entrepreneurial risk, if necessary borrow from other papers.

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- The authors take into account failure risk, but I was concerned that due to small sample the expected age of the business was not correctly estimated.
- I “happen” to have data that allows the estimation of age of business created by MBAs.
- Data on MBAs for full cohorts of top MBA programs (Harvard, MIT, Stanford, Booth, Kellogg, Columbia, UCLA, NYU, Ross, Duke, Berkeley, Wharton, Yale) from 1998 to 2012. (~ 85,000 MBA students)
- In this dataset we observe full-resumes, consequently we can see entrepreneurs (self-employment and employer-firm) and for how long.

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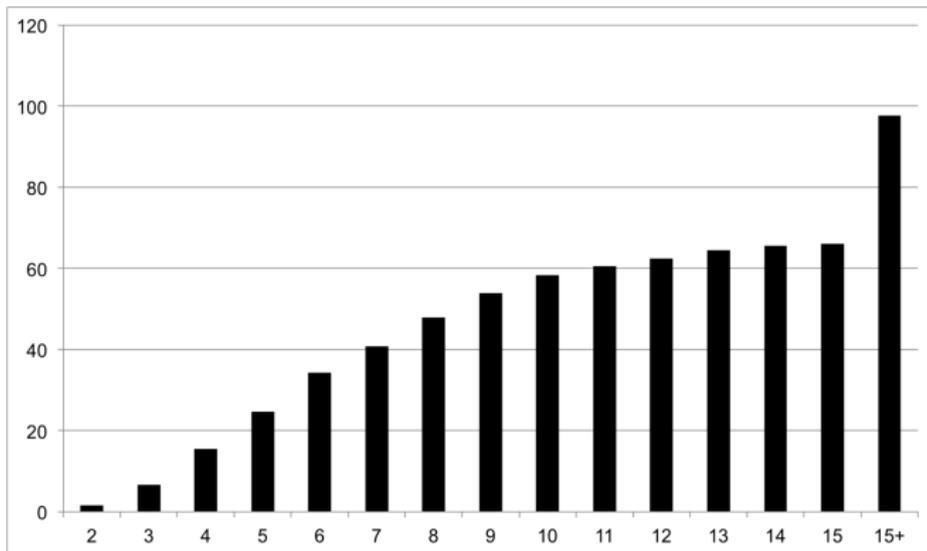
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Age of businesses created by MBAs within two years after graduation. Only cohorts of 2001, 2002, 2003. Picture below plots the cumulative distribution of age (exit due to failure and success sale).

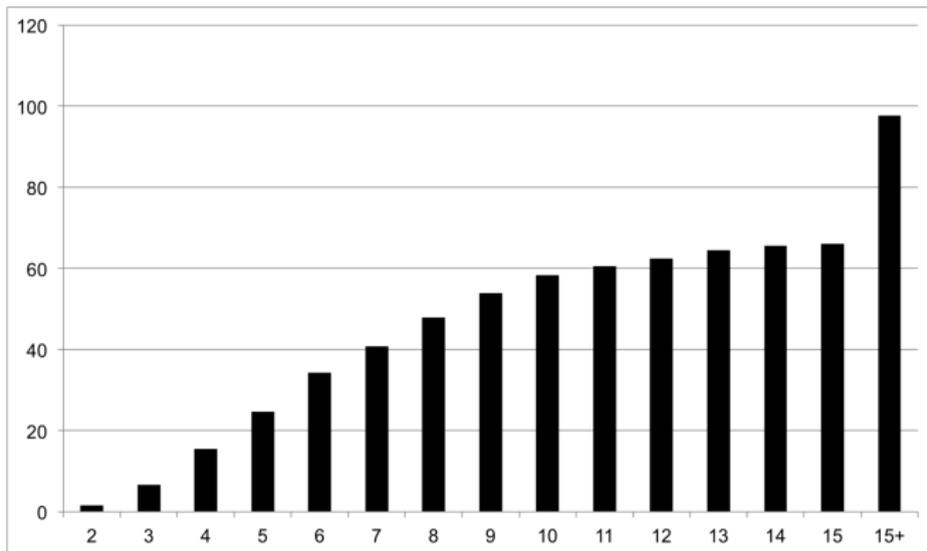
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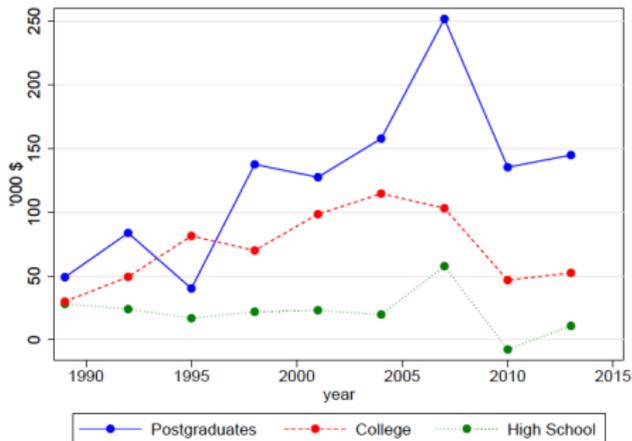
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The medium age is between 8 and 9 years. Using the authors numbers, the average age of a business created by an postgraduate falls between 9 and 12 years!

Comment 3: Mechanism/Channels



(b) Excess Return, $\phi = \theta - w$

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MBA



PhD in Physics

Comment 3: Mechanism/Channels

- What are the advanced skills that are not important for the wage premium of workers?
- What the skills that are important for college premium on wages are not important for entrepreneurship premium?

	Entrepreneurial Pr.	Wage Pr.
PhD and MBAs vs Bachelors	✓	x
Bachelors vs High-school	x	✓

Conclusions

- Important Question!
- Recommend reading.
- Evidence that there is an increasing post graduation entrepreneurship premium.

Some improvements to be made:

- Convince that the sample of entrepreneurs by education group is representative.
- Find other external validations for key parameters.
- Include Income Risk.
- Provide more economics on why there is a premium between postgrad and college, but not college and high-school.

Thank you!