

# Entrepreneurship and the Economic Crisis

John Robertson, Federal Reserve  
Bank of Atlanta  
Session Chair

# Important Questions

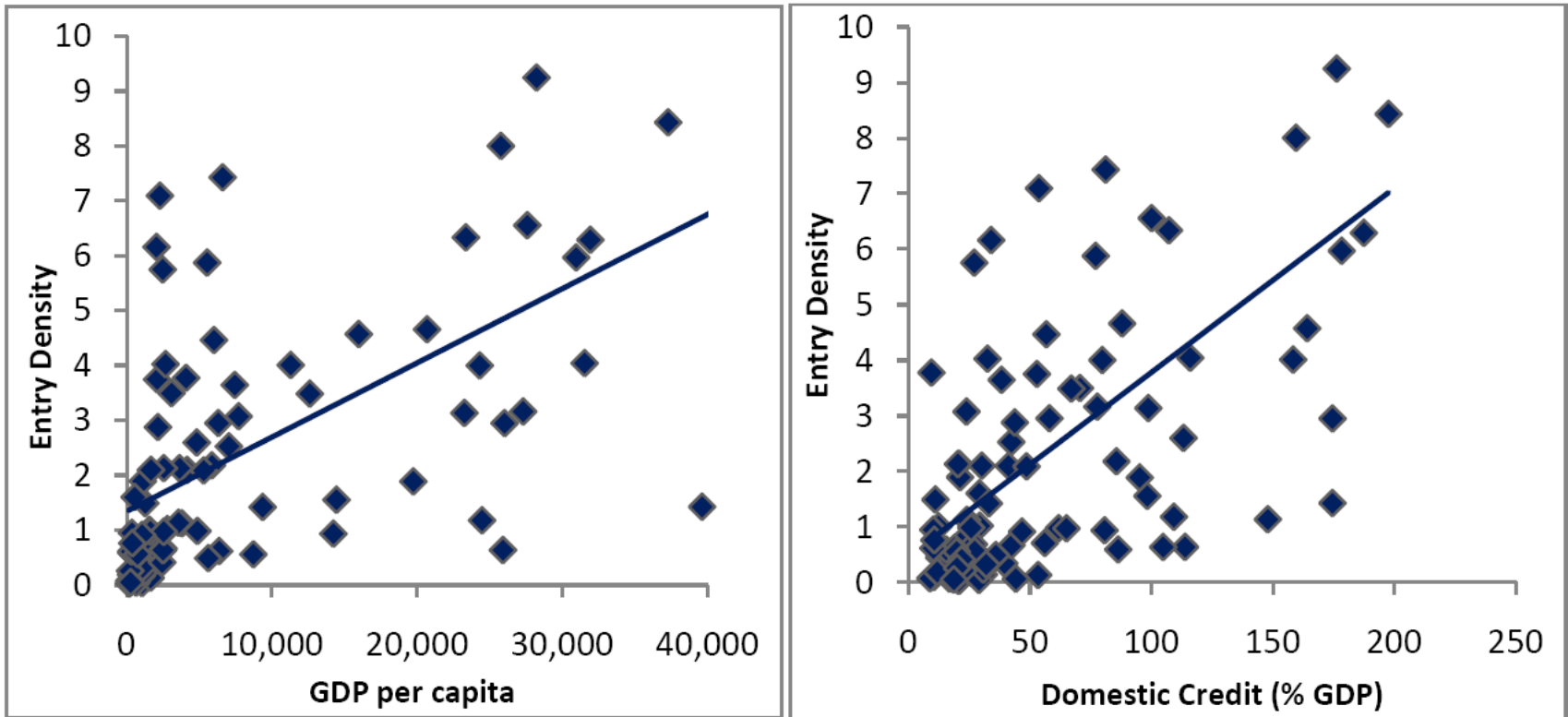
- Who creates jobs?
  - Small vs. large
  - Young vs. old
  - Debt vs. equity financed
  - Cities vs. suburbs, etc, etc
- What jobs?
  - Quality
  - Durability
- Has the financial crisis and recession impacted the “who” and “what”?

# Paper topics/summaries

- Business creation
  - Firm level (Cross-country)
  - Entry rate positively related to country's income and use of credit
- Business creation
  - Individual level (U.S.)
  - Local unemployment is an important predictor, especially for unemployed workers
- Capital structure of young (2004 vintage) firms
  - Firm level (U.S.)
  - Choice of initial capital structure is difficult to predict, but there is convergence toward common structure over time

# **IMPACT OF THE FINANCIAL CRISIS ON NEW FIRM CREATION**

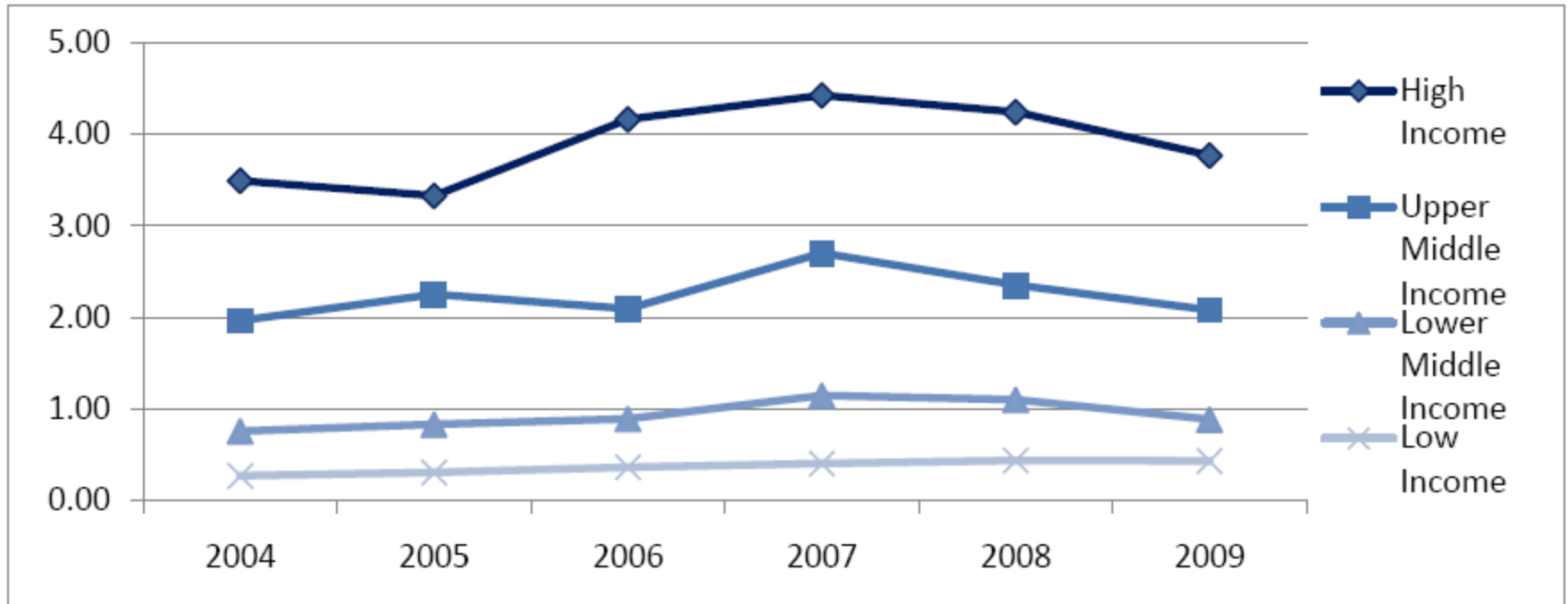
# Business creation is correlated with income and credit



Income and credit are also positively correlated

# Creation rates have slowed since 2006

New firms (corporations) as % of population



# Comments

- Data limitation narrows definition of new businesses to corporations (excludes partnerships, sole proprietors)
  - Fairlie (2010) using a broader definition of business, finds an increase in business creation in U.S. during recessions
- The regression analysis doesn't add much to the charts
  - Pre-crisis trend in entry density was stronger in higher income countries, and then slowed relative to trend
  - Fit seems too good to have really isolated “economic effects”

# **THE GREAT RECESSION AND ENTREPRENEURSHIP**



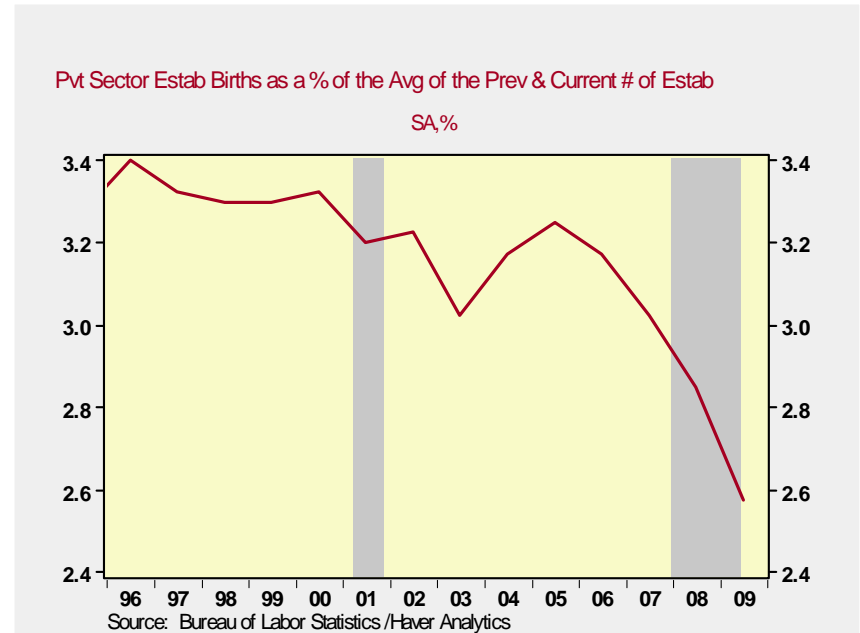
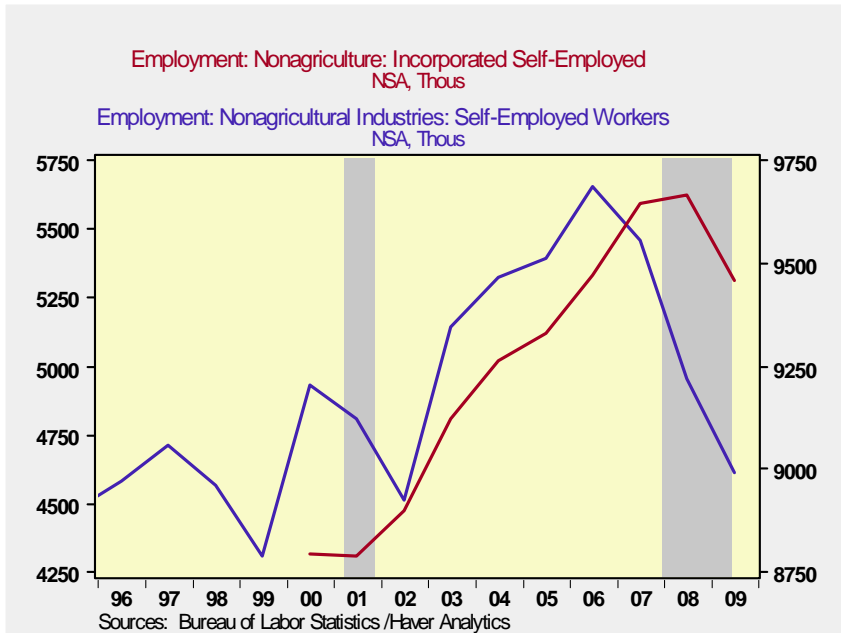
# Definition: Entrepreneurship Rate

- % of pop. that start a business each month
  - Answer yes to the question: “Do you have a business or a farm”? But did not have a business or farm last survey
  - The business is their main job, and at least 15 hrs/wk
- CPS advantages
  - relatively detailed information on business owner
  - covers all forms of businesses (incorporated/unincorporated/employer/non-employer businesses)
- CPS disadvantages
  - no information on business performance

# Measurement issues

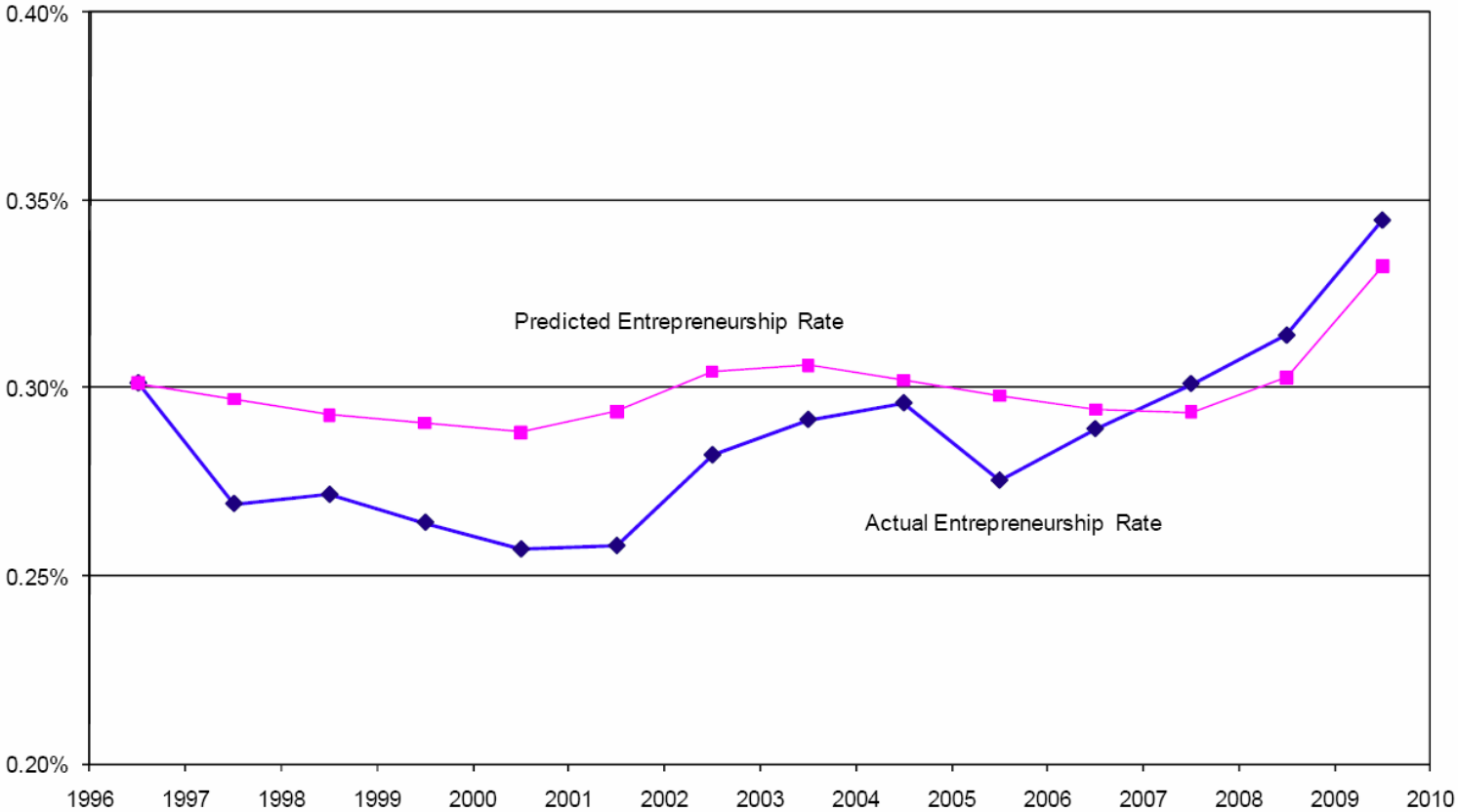
- Entrepreneurship
  - Does not capture business owners who changed from nonbusiness owners to business owners with < 15 hrs/wk.
  - Treats those moving from <15 to > 15 hrs/wk as a new business
  - Reconciling with other measures of business creation?
- Home equity
  - Is local average home prices a good proxy for an individual's home equity?
  - Linking with other micro-data sources?

# Declines in self-employment and establishment births



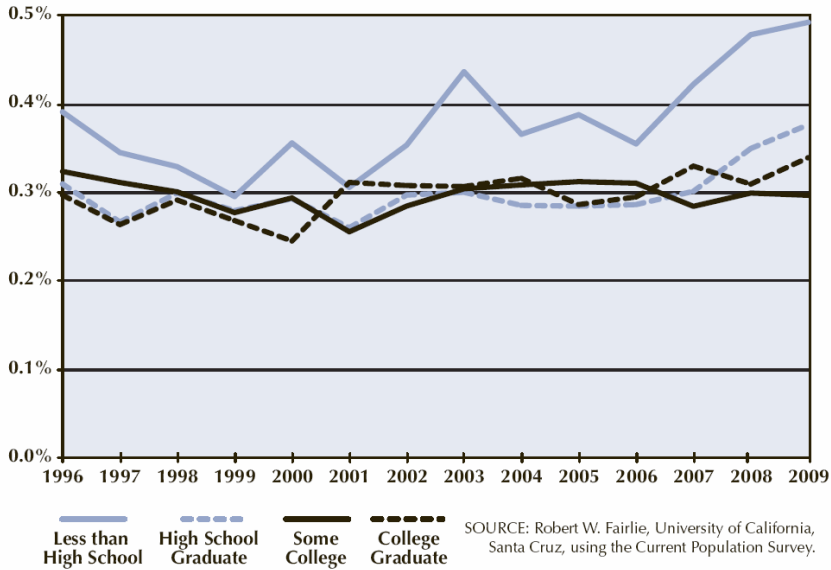
# Entrepreneurs of Necessity?

Figure 9: Actual and Predicted MSA Entrepreneurship Rates from Local Unemployment Trends  
Current Population Survey (1996-2009)

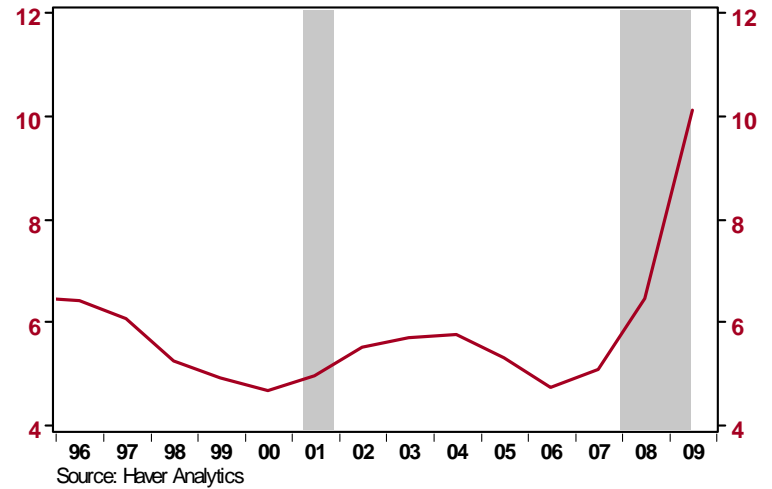


# Education

Kauffman Index of Entrepreneurial Activity by Education (1996–2009)

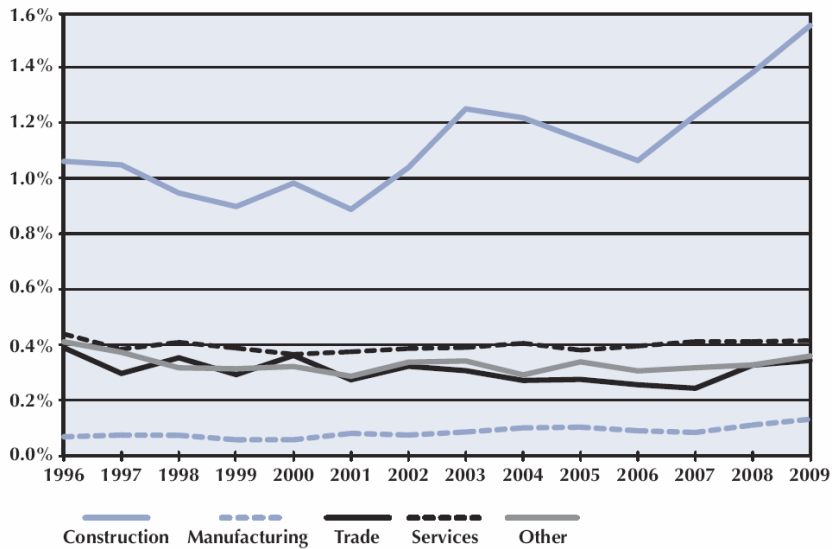


Unemployment Gap: Less than HS vs. College Degree

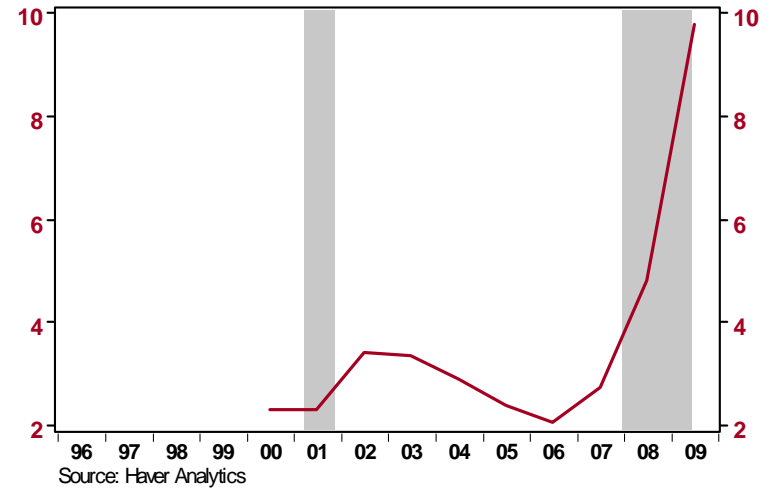


# Industry/Occupation

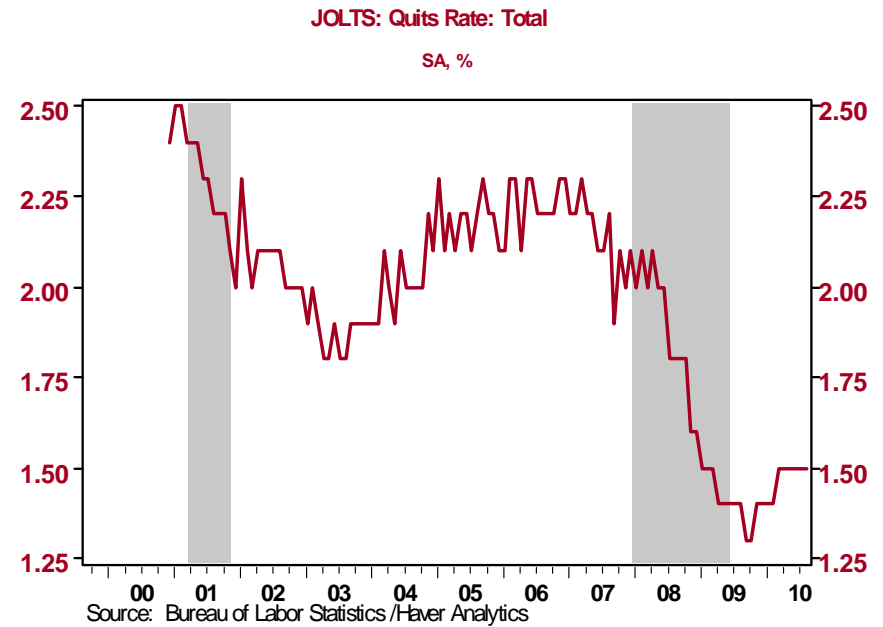
## Kauffman Index of Entrepreneurial Activity by Industry (1996–2009)



## Unemployment Gap: Construction vs. Total



- The unemployed have higher business creation rates than employed workers

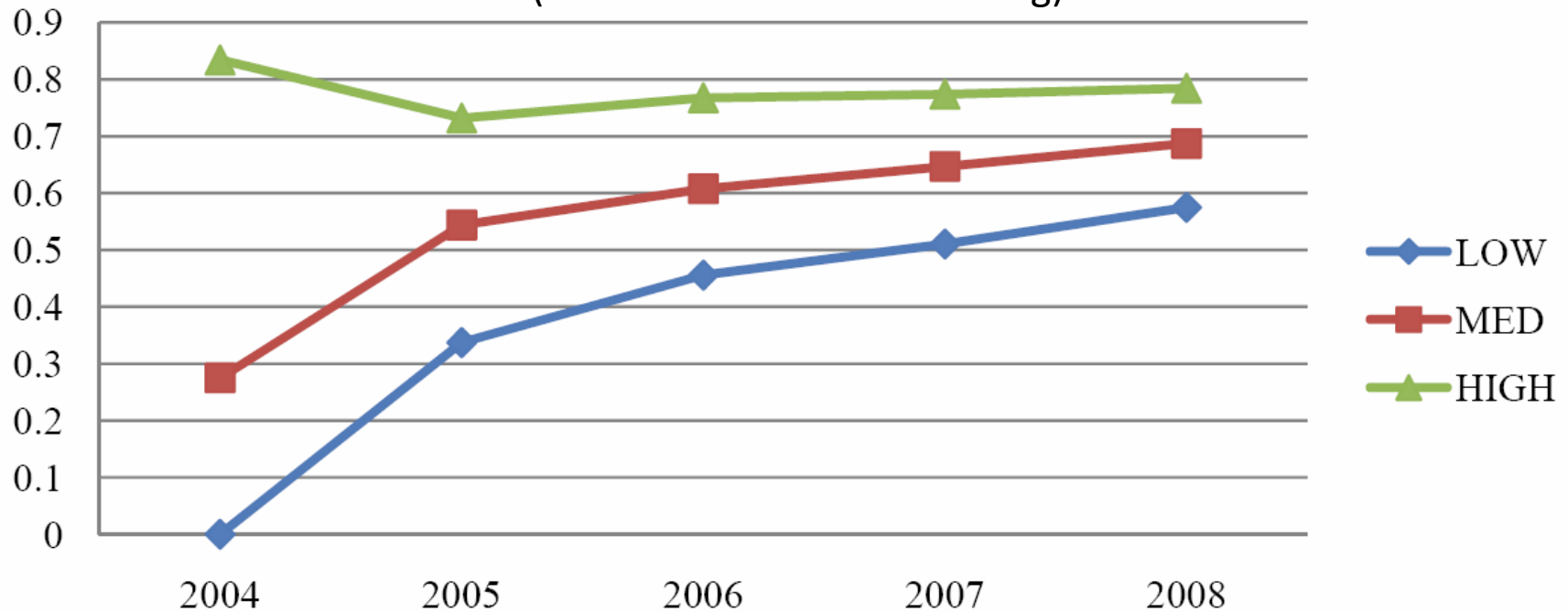


**THE DISTRIBUTION AND EVOLUTION OF  
THE CAPITAL STRUCTURE OF  
ENTREPRENEURIAL FIRMS**



# Evolution of Capital Structure

**Book Leverage**  
(Debt share of total financing)



# Comments

- Robb and Robinson (2010):
  - On average, startups rely on formal credit market access even at their earliest stages of life.
  - On average, debt continues to be a primary source of funding throughout the first four years of the firm's life.
- This paper:
  - Finds initial state-dependence, and convergence of capital structures over time
  - can't explain the initial capital structure choice
  - can't find a large 2007/08 effect on convergence
- Is capital structure of non-survivors different?

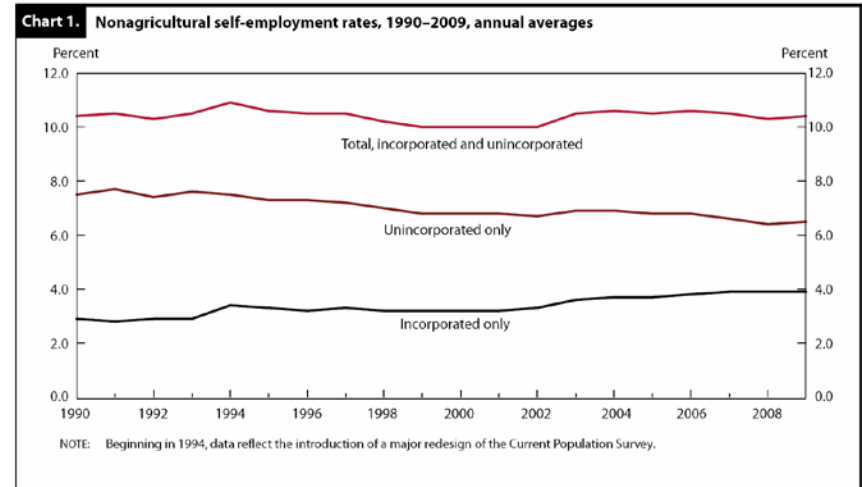
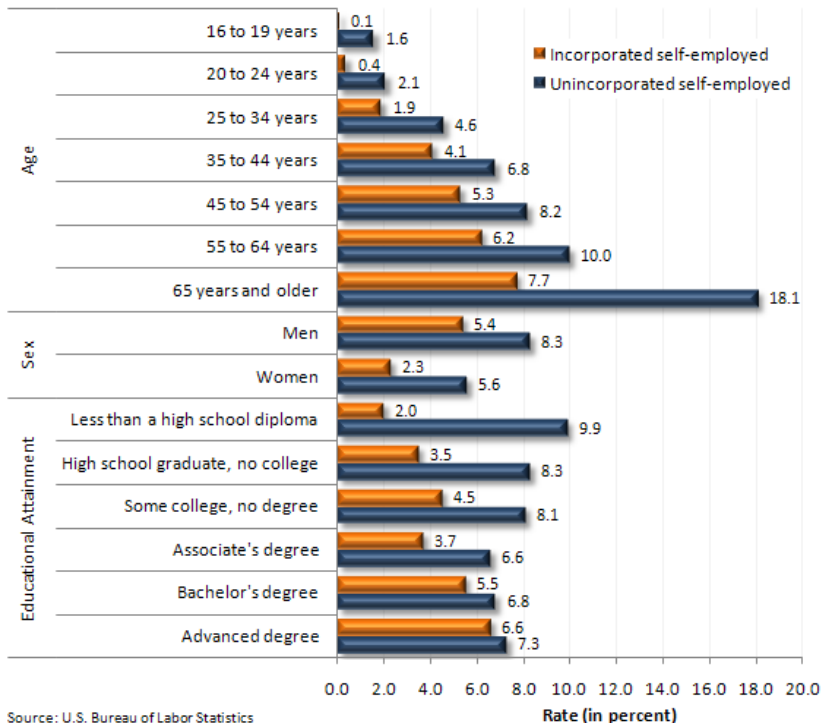
- Start-up firms do not appear to be affected in the long term if they start in a recession, unless that recession is prolonged.
  - One implication is that cohorts that started right before or at the start of the 2007–09 recession may have worse outcomes relative to firms starting more recently.
    - After Inception: How Enduring is Job Creation by Start-ups?  
Michael Horrell and Robert Litan, Ewing Marion Kauffman Foundation, July 2010

# Entrepreneurship and the Economic Crisis

# CPS: Self-employment measures

“Last week, were you employed by government, by a private company, a nonprofit organization, or were you self-employed (owned a business)?”

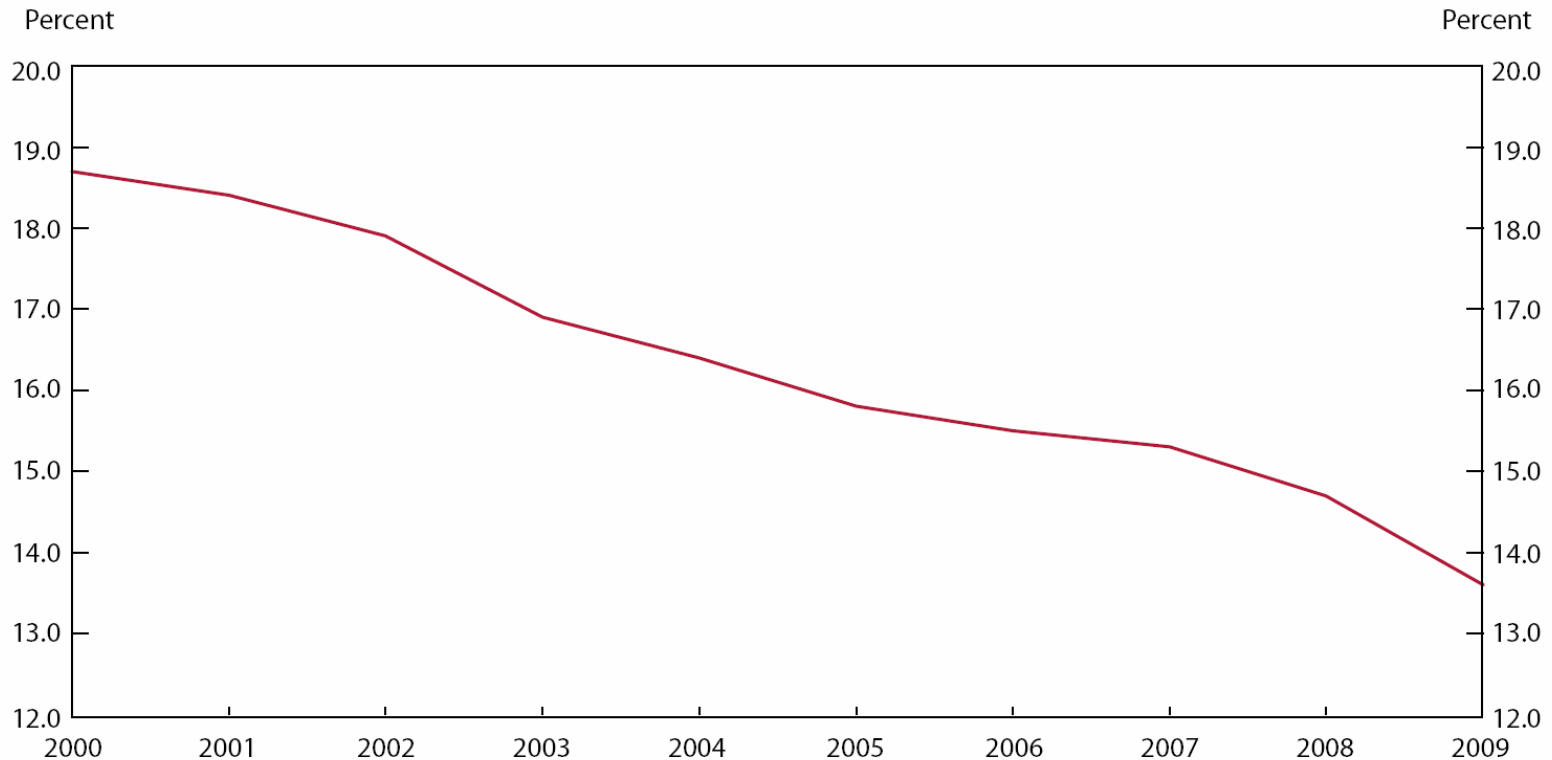
Self-employment rates, by selected characteristics, 2009 annual averages



Construction: self-employment rate 18% (unincorporated) v.s 9% (incorporated)

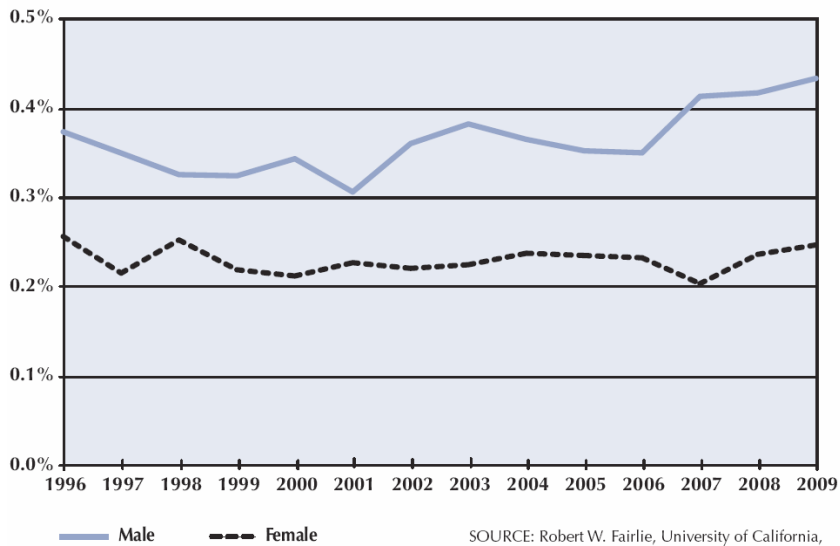
# Self-employed with employees

**Chart 4.** Proportion of the unincorporated self-employed with paid employees, 2000–2009 annual averages



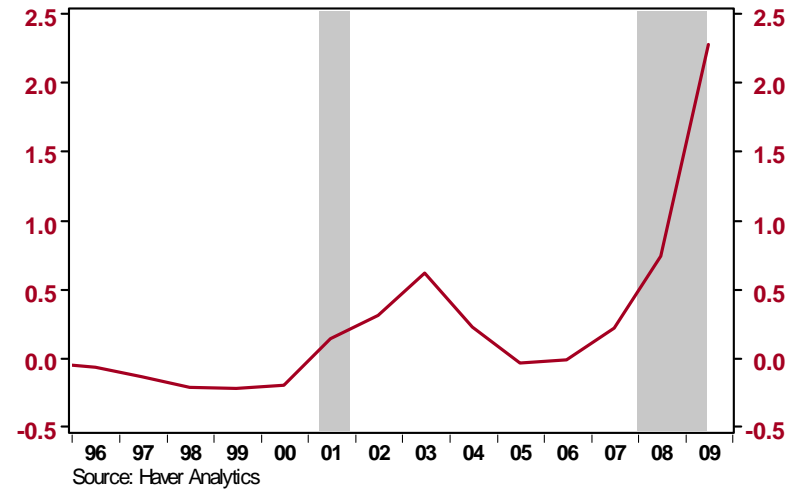
# Gender

### Kauffman Index of Entrepreneurial Activity by Gender (1996–2009)

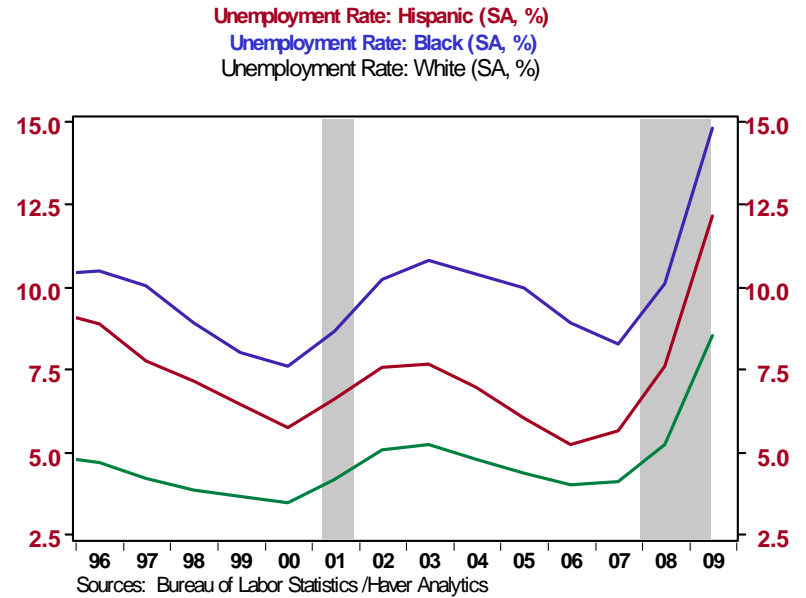
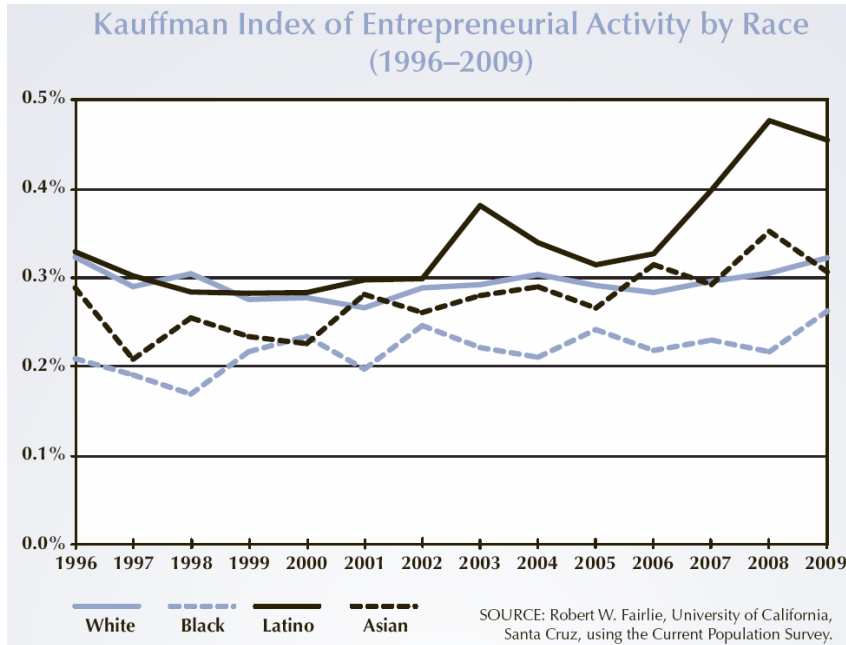


SOURCE: Robert W. Fairlie, University of California, Santa Cruz, using the Current Population Survey.

### Unemployment Gap: Males vs. Females



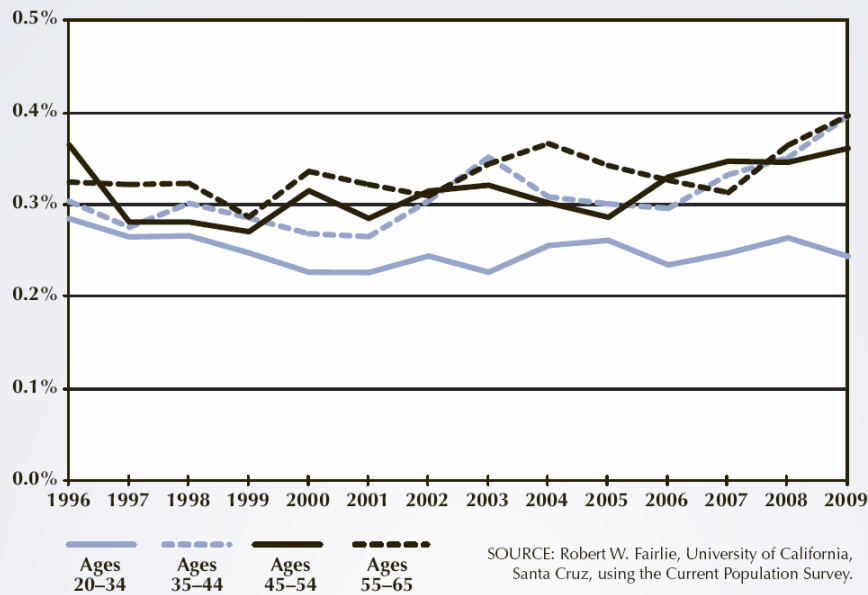
# Race





# Age

Kauffman Index of Entrepreneurial Activity by Age (1996–2009)



Unemployment Gap: Over 55 vs. Total

