Entrepreneurship: Occupational, Structural and Functional Perspectives

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Entrepreneurship: the need for conceptual foundations

- Standard research questions
  - Who becomes an entrepreneur?
  - How do entrepreneurs act?
  - What are the economic and social implications of entrepreneurial activity?

- Problems
  - Who do we study?
    - Proprietors, founders, inventors, innovators?
    - But not: funders, managers, adaptors
  - What actions do we study (and, for policy, seek to encourage)?
    - Experimentation, creativity, discovery
    - Commercialization of ideas
    - Establishment of new enterprises
Characterizing alternative conceptions of entrepreneurship

- Unit of analysis
- Phenomena to be explained
- Theoretical, methodological approaches
- Empirical proxies
- Policy instruments

One useful taxonomy: occupational, structural, and functional perspectives

Entrepreneurship: occupational perspectives

- Unit of analysis: self-employed individual
- Core framework 1: labor economics
  - Occupational choice (Parker, 2004)
  - Many examples
- Core framework 2: psychology, cognitive science
  - Psychological studies of the entrepreneur’s characteristics and cognitive processes (Sarasvathy)
- Data and measurement: PSID, tax records, GEM surveys
- Issues: collective entrepreneurship?
Entrepreneurship: structural perspectives

- **Unit of analysis:** firm, industry, region, economy
  - Entrepreneurial firm: new or small
  - Entrepreneurial industry, region, economy: one with lots of new or small firms
  - “Entrepreneur,” “entrepreneurship,” “entrepreneurial”

- **Core approaches**
  - Industrial organization (S-C-P, game theory)
  - Industry evolution (evolutionary economics, complexity theory)

- **Key figures:** Audretsch, Acs, many others
- **Data and measurement:** census, tax records, surveys

Entrepreneurship: functional perspectives

- **Innovation** (Schumpeter, Baumol)
- **Imagination, creativity, leadership** (management literature)
- **Alertness to opportunities** (Kirzner)
- **Adaptation to exogenous shocks** (Schultz)
- **Judgmental decision-making** (Cantillon, Knight, Mises, Casson, Foss and Klein)

- **Note:** little direct relationship to occupational and structural concepts
Problems mapping occupational and structural perspectives to functional perspectives

- Self-employment and uncertainty-bearing
  - Wage uncertainty for proprietors is comparable to that for corporate executives whose compensation includes significant variable components (cf. Carroll and Samwick, 1997, 1998; Hurst, Kennickell, Lusardi, and Torralba, 2005).
  - Evidence from VC and angel contracts: while founders usually retain substantial equity stakes in their ventures, investors typically retain a much higher percentage; moreover, both cash flow rights and control rights are tied to venture performance, under the founder’s control, further increasing the uncertainty born by investors (Kaplan and Stromberg, 2003).
  - Implication: Knightian entrepreneurship is frequently exercised by corporate executives and investors, not just self-employed individuals.

Problems mapping occupational and structural perspectives to functional perspectives (cont.)

- Self-employment and innovation
  - Weak relationship between standard measures of innovation (R&D, patents, new products and processes) and a firm’s “entrepreneurial” status (treating sole proprietorships and venture-funded startups as “entrepreneurial” firms).
Further implications of the functional perspective

- Who are entrepreneurs and why do they matter?
- How is entrepreneurship organized and managed?
- What is the relationship between entrepreneurship and resources?
- Can entrepreneurship be taught and, if so, how?

Examples

Organizing entrepreneurship:
Does the entrepreneur need a firm?

- Entrepreneurship as innovation
  - Innovator can sell or license
- Entrepreneurship as opportunity discovery
  - Doesn’t require asset ownership
  - Can be bought and sold on the market
- Entrepreneurship as opportunity exploitation
  - Judgment: decision-making about the deployment of resources under uncertainty
  - Cannot be modeled by a formal decision rule
  - Is non-contractible (Knight, 1921)
  - Implies asset ownership
Organizing entrepreneurship: The role of firm and industry structure

- Incentives for Schumpeterian innovation
  - Firm: R&D, rewards for long-run performance
  - Legal and regulatory environment: R&D tax credits, patent system
  - Schumpeter as an exception

- Incentives for Kirznerian alertness
  - No supply curve for alertness per se
  - Legal and regulatory environment (property rights, price controls) affects the exercise of alertness.

Organizing entrepreneurship: The role of firm and industry structure (cont.)

- Incentives for Knightian judgment
  - Need for secure property rights
  - Organizational structure should be designed to encourage productive (and discourage destructive) judgmental decision making (Foss, Foss, and Klein, 2007).
    - Role of capital heterogeneity (Lachmann, 1956)
    - Decentralizing decision rights provides incentives for the discovery or creation of new asset attributes.
    - Ownership of assets conveys the right to assign these decision rights and to exercise authority.
  - Further implications
    - Firms as controlled experiments
    - Changes in firm scale and scope as processes of discovery and learning
Entrepreneurship and capital heterogeneity

We are living in a world of unexpected change; hence capital combinations . . . will be ever changing, will be dissolved and reformed. In this activity, we find the real function of the entrepreneur (Lachmann, 1956).

See also Foss, Foss, Klein, and Klein, “The Entrepreneurial Organization of Heterogeneous Capital” (2007).

Organizing entrepreneurship: The role of firm and industry structure (cont.)

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  - Further implications
    - Firms as controlled experiments
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Application I: opportunities and organizational form

- Attempts to encourage opportunity discovery do not necessarily foster opportunity exploitation.
  - Efficiency requires that entrepreneurs (and what Foss, Foss, and Klein 2007 call “proxy-entrepreneurs”) bear the full wealth effects of their actions.
  - Inside the firm: promoting experimentation, creativity, etc. encourages moral hazard unless rewards and punishments are symmetric.
  - Outside the firm: strong IP regime, SBIR programs, etc. may encourage overspending on discovery.

- Organizing for opportunity exploitation
  - Staged finance
  - Returns to M&A under uncertainty (cf. Scharfstein, 1988)

Application II: entrepreneurial teams

- Perception of a (subjectively identified) opportunity is an individual act, but exploitation of opportunities can be a team or group activity.
  - Syndicated venture capital, private equity, loans
  - Partnerships (professional services firms, closed-membership coops)
  - Entrepreneurial networks (Parker, 2007)

- Sharing perceived opportunities
  - Penrose and the management team as a bundle of heterogeneous human resources, shaped by experiential learning (Foss, Klein, Kor, and Mahoney, 2007)
  - Cooperatives, partnerships, corporations: convincing others to invest

- Organizational costs of collective action (Olson, Hansmann)
Application II: entrepreneurial teams (cont.)

- Evidence from “new generation” cooperatives in Renville, Minn. (Chambers, Cook, and Klein, 2005; Chambers, 2007)
  - Creation and diffusion of a new organizational form
  - Role of the project champion(s)
  - Social networks, shared experience, and the willingness to invest
  - Path dependence and the stickiness of shared mental models (difficulty of conversion to LLC)

Summary and implications

- Need to consider broader conceptions of the entrepreneurial function
  - Investors
  - Reactors

- Need to consider trade-offs
  - E.g., emphasis on occupational and structural entrepreneurship - don’t forget the opportunity cost (Grameen?)
  - Possible overinvestment in experimentation and creativity, given scarcity and moral hazard

- Need for research relating broader measures to traditional measures