### HIGH IMPACT ENTREPRENEURSHIP

David B. Audretsch

FORO PIONEROS EMPRENDIMIENTO DE ALTO IMPACTO

**ABRIL 23 DE 2014** 

### CONTRADICTIONS IN ENTREPRENEURSHIP

• "A Strategy for American Innovation: Securing Our Economic Growth and Prosperity," National Economic Council, Council of Economic Advisers, and Office of Science and Technology Policy, Washington, D.C.: The White House, February 2011

#### **Organizational Status**

- Person
- Firm
- Team (ownership, characteristics)

#### **Behavior**

- Opportunity Recognition
- Opportunity Creating
- Opportunity Exploitation

### Three Views of Entrepreneurship

#### **Performance**

- Growth (Gazelles)
- Innovation
- Social

### FUNDAMENTAL ISSUES

- What constitutes a "high impact entrepreneurship"?
- How prevalent are high impact entrepreneurships?
- What is the (social & economic) contribution from high impact entrepreneurship?
- What policies are conducive to high impact entrepreneurship?

# WHAT CONSTITUTES HIGH IMPACT ENTREPRENEURSHIP?

- o "All enterprises with average annualized growth greater than twenty percent per annum, over a three-year period, and with ten or more employees at the beginning of the observation period. Growth is thus measured by the number of employees and by turnover."
  - the OECD-Eurostat Manual on Business Demography Statistics (2007)

#### GAZELLE FIRMS

- "All enterprises up to five years old with average annualized growth greater than twenty percent per annum over a threeyear period, and with ten or more employees at the beginning of the observation period."
  - OECD-Eurostat Manual on Business Demography Statistics (2007)

#### PREVALENCE

- Less than 5 percent of firms in U.S. (Birch and Medoff, 1994)
- Between 2-4 percent of firms in U.K. (BERR, 2008)
- Less than one percent of enterprises in most countries (OECD, 2007)
- Less than two percent of turnover in most countries (OECD, 2007)

### ECONOMIC IMPACT

### Employment

- --Birch and Medoff (1994)1988-1992, around 70 percent of all new jobs in the United States created by existing firms (rather than new startups) were accounted for by only four percent of the firms. This same four percent of the firms accounted of 60 percent of all new jobs in the entire U.S. economy.
- --U.K. government study finds between two to four percent of all firms account for most of the growth in employment (BERR, 2008)
  - -- Account for high share of employment created in any time period (OECD,2007)

### HIGH IMPACT ENTREPRENEURSHIP: EMPLOYMENT

• Henrekson and Johansson (2010, p. 1), "net employment growth rather is generated by a few rapidly growing firms—so-called gazelles—that are not necessarily small and young. Gazelles are found to be outstanding job creators. They create all or a large share of net new jobs. On average, gazelles are younger and smaller than other firms, but it is young age more than small size that is associated with rapid growth."

### ECONOMIC IMPACT

#### Innovation

-- small & medium sized enterprises account for a high share of innovative activity in OECD countries

#### Opportunities

- -- small & medium sized enterprises provide opportunities for workers who might otherwise be marginalized
- Positive Externalities on Performance of Other Firms & Economy
  - -- main impact external to firm

### KNOWLEDGE SPILLOVER ENTREPRENEURSHIP

- Knowledge created in one organizational context but not fully commercialized triggers entrepreneurial startups
- Entrepreneurship provides conduit for spillover of knowledge from organization creating knowledge to new firm commercializing it

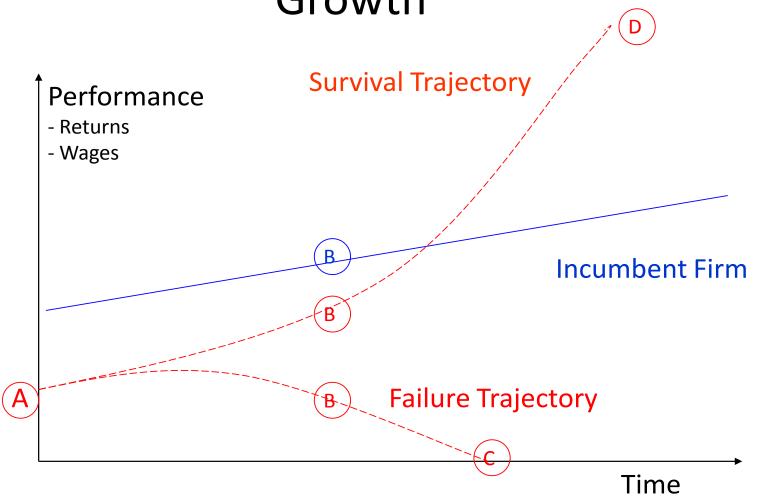
### KNOWLEDGE SPILLOVER ENTREPRENEURSHIP

- New & firms account for high share of employment created
- Prediction that high growth should be systematically related to
  - High knowledge contexts (firm & locational specific)
  - Negatively related to firm age (firm specific)
  - Negatively related to firm size (firm specific)

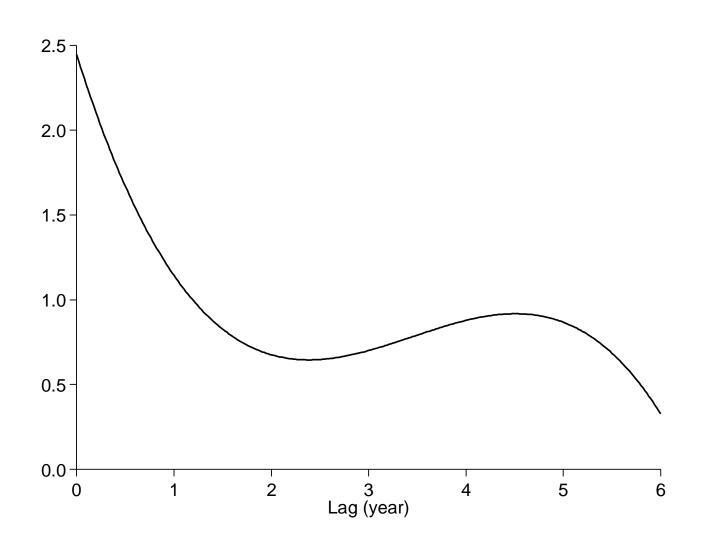
# EMPIRICAL EVIDENCE ON HIGH IMPACT ENTREPRENEURSHIP

- Growth rates are higher for younger enterprises
- Growth rates are higher for smaller enterprises
- Growth rates are even higher for small and young enterprises in knowledge-intensive industries

Entrepreneurship & Firm Growth



# TEMPORAL IMPACT OF ENTREPRENEURSHIP ON EMPLOYMENT GROWTH IN THE UNITED STATES (SOURCE: ACS AND MUELLER, 2007)



### CHARACTERISTICS OF HIGH IMPACT ENTREPRENEUR

- High level of human capital (education)
  - BERR (2008); Baum et al. (2001); Baum &Locke (2004); Vivek et al. (2009)
- Experience as entrepreneur
  - Baum &Locke (2004)
- Experience as employee in high growth firm
  - Klepper (2009); Agarwal et al. (2004)

# CHARACTERISTICS OF HIGH IMPACT ENTREPRENEUR

- High levels of experience in industry
  - Baum et al. (2001); Baum &Locke (2004)
- Gender (male)
  - BERR (2008)

### CHARACTERISTICS OF FOUNDING TEAM OF HIGH IMPACT ENTREPRENEURS

- Size of founding team
- Stability of the team members
- Time together as a team
- Heterogeneity of background
- Cohesiveness
  - Eisenhardt & Schoonhoven, 1990

### LOCATIONAL CHARACTERISTICS OF HIGH IMPACT ENTREPRENEURSHIP

- Existence of cluster or agglomeration of complementary economic activity & supporting institutions
- Empirical evidence identifying higher growth rates for entrepreneurial startups within a cluster

#### EMPIRICAL EVIDENCE

- Empirical evidence identifying higher growth rates for entrepreneurial startups within a cluster
  - Gilbert et al. (2006 & 2008); Lechner and Dowling (2003)
- Geographic proximity facilitates accessing and absorbing localized knowledge spillovers
  - Jacobs (1969); Jaffe et al. (1993); Audretsch & Feldman (1996)

### LOCALIZED SPILLOVER CONDUITS

- Worker mobility
  - Almeida and Kogut (1999); Saxenian (1990); Lee, Miller, Hancock and Rowen (2000)
- Entrepreneurial startups (Audretsch, Keilbach & Lehmann, 2006)
- Localized networks, linkages & social capital
  - Saxenian (1990)

#### EMPIRICAL EVIDENCE

- Role of Geographic Proximity to Urban Area
  - Location with close geographic proximity to urban area important
  - High impact firms found not only in urban areas
  - Importance of urban area decreasing over time
  - No discernable difference in spatial location of highand low- impact firms

# Correspondence between four transitions and key policy areas

Phase	Transition	Key Policy Areas	Key Stimuli / Removal of Barriers
Ι	To Ambitious Individual	Social and education policy	Human talent and ambitions
II	From Ambitious Individual to Entrepreneur	Entrepreneurship policy	Allocation of talent; entrepreneurship as career perspective
III	From Entrepreneur to Ambitious Entrepreneur	Entrepreneurship and industrial policy	Allocation of entrepreneurship; growth attitude
IV	From Ambitious Entrepreneur to Realized New Value Creation	Industrial policy and labor market policy	Reduction or removal of growth barriers

### POLICY TO PROMOTE HIGH IMPACT ENTREPRENEURSHIP

- Education Policy
- Promote access to finance
- Reduce regulatory and administrative burdens
  - "There is strong evidence that a heavy regulatory burden negatively impacts new companies' into the market and thereby contributes to reduced competitive pressure and less entrepreneurship."
  - Swedish Agency for Growth Policy Analysis (2010, p. 8)

# POLICY TO PROMOTE HIGH IMPACT ENTREPRENEURSHIP

- Labor Market Policies
- Business Accelerator Programs
- Involve universities & other institutions

### CONCLUSIONS

- High impact entrepreneurship plays key role in growth, job creation, access to opportunities & innovation in OECD
- Entrepreneurial characteristics of human capital, experience, access to finance & social capital important in facilitating high impact entrepreneurship
- Key role of policy in facilitating high impact entrepreneurship