

Entrepreneurship (what's the big deal) and the Macroeconomy in the 21st Century

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SME Learning
Entrepreneurship and Development Workshop

The 21st Century

- In the Solow (1956) world data for growth was provided by census data on new and existing establishments.
 - Lower interest rates; Anti-Trust
- In the Romer (1990) world data for growth should be provided by new firms that take advantage of knowledge spillovers.
 - Enabling policies for new firms

Growth Theory

- Solow Model (1956)
 - Economies of scale
 - » Growth comes from new (bigger) plants
- Romer Model (1990)
 - Externalities (knowledge spillovers)
 - » Growth Comes from new (growing) firms
- Knowledge is more important than capital
- Spillovers are instantaneous and costless

New Growth Theory

- Arrow 1962
- Knowledge is a public good
- Partially excludable
- Also
- Greater degree of uncertainty
- Higher asymmetries
- Greater cost of transacting new ideas

Entrepreneurship

- This leads to:
- the knowledge filter: $\theta = kc/k$
- The Knowledge Spillover Theory of Entrepreneurship
- Based on an Occupational Choice Model
- $P(e) = f(\pi^*(\theta) - w)$

Who Should be an Entrepreneur?

People most likely to pursue self-employment are highly educated and skilled, often possessing significant personal financial resources. Likewise, those lacking the requisite skills and capital, whether immigrants or otherwise, are unlikely to start small businesses. Among people who choose self-employment without appropriate education, skills, and financial resources, business failure and self-employment exit rates are high.

(Bates, 1998, 1)

Age vs Size

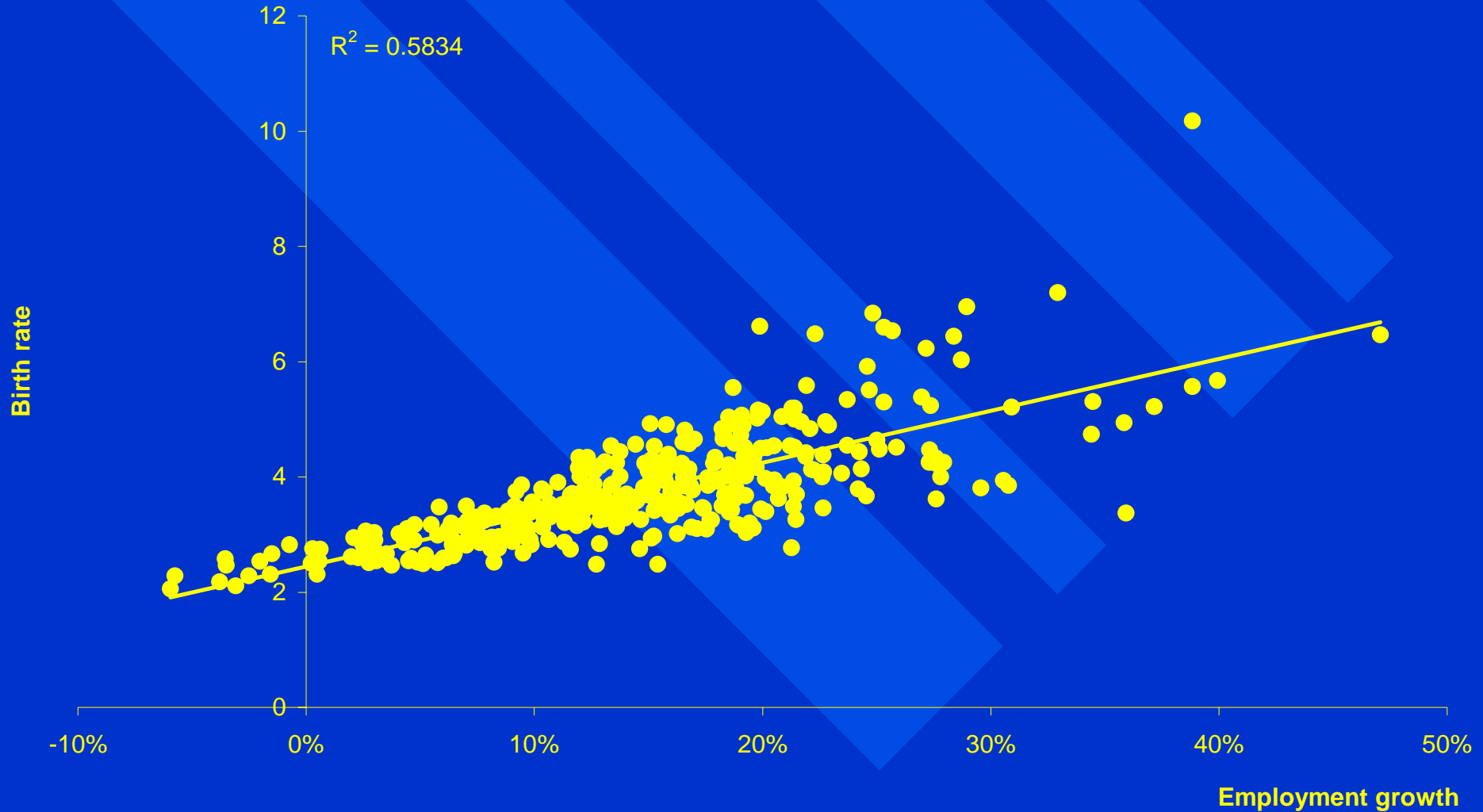
- Birch (1970s)
 - Size is important.
 - Fast growth is important.
- DRS (1980s)
 - Age and size.
- Davis and Haltiwanger (1990s), Acs and Armington (2005) and Audretsch et al (2005)
 - Age is the key variable.

What do new firms (AGE) do?

- Innovation (Acs and Audretsch).
- Employment and job creation (Birch and others).
- Economic Growth (productivity) Davis and Haltiwanger and others).

Firm Birth Rate and Growth

Figure 2: Entrepreneurship and growth 1991-96



Explaining Regional Employment Growth

1990-1993; 1993-1996; 1996-1999

- Entrepreneurial Activity (+)
 - New firms (+ + +)
 - Small firms (+ 0 0)
- Agglomeration Effects (+)
 - Density (- - 0)
 - Specialization (- - -)
- Human Capital (+)
 - High school (+ + +)
 - College (0 0 +)

Figure A:
Distributions of 1995 Employment by Age and Type of Establishment

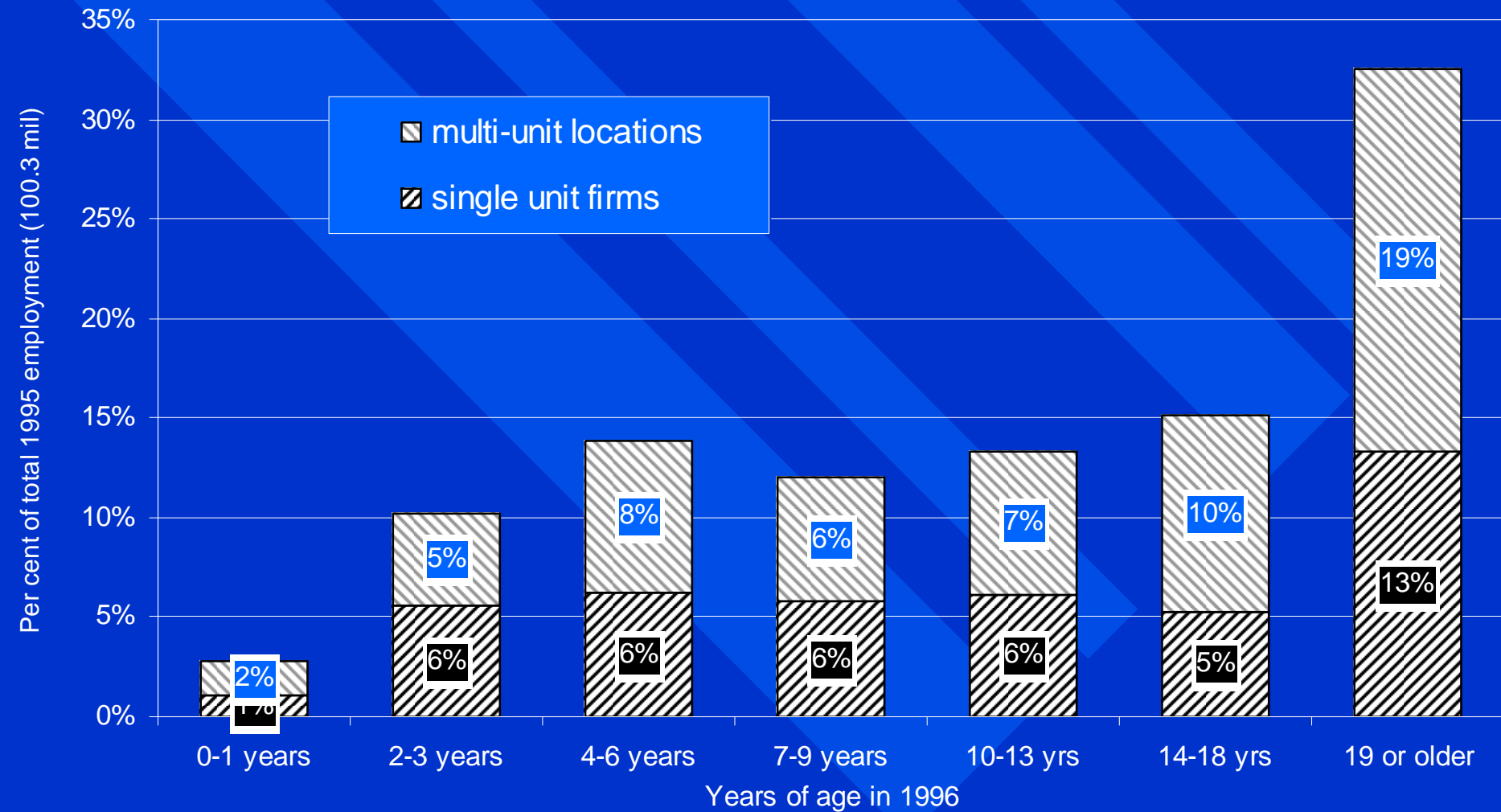


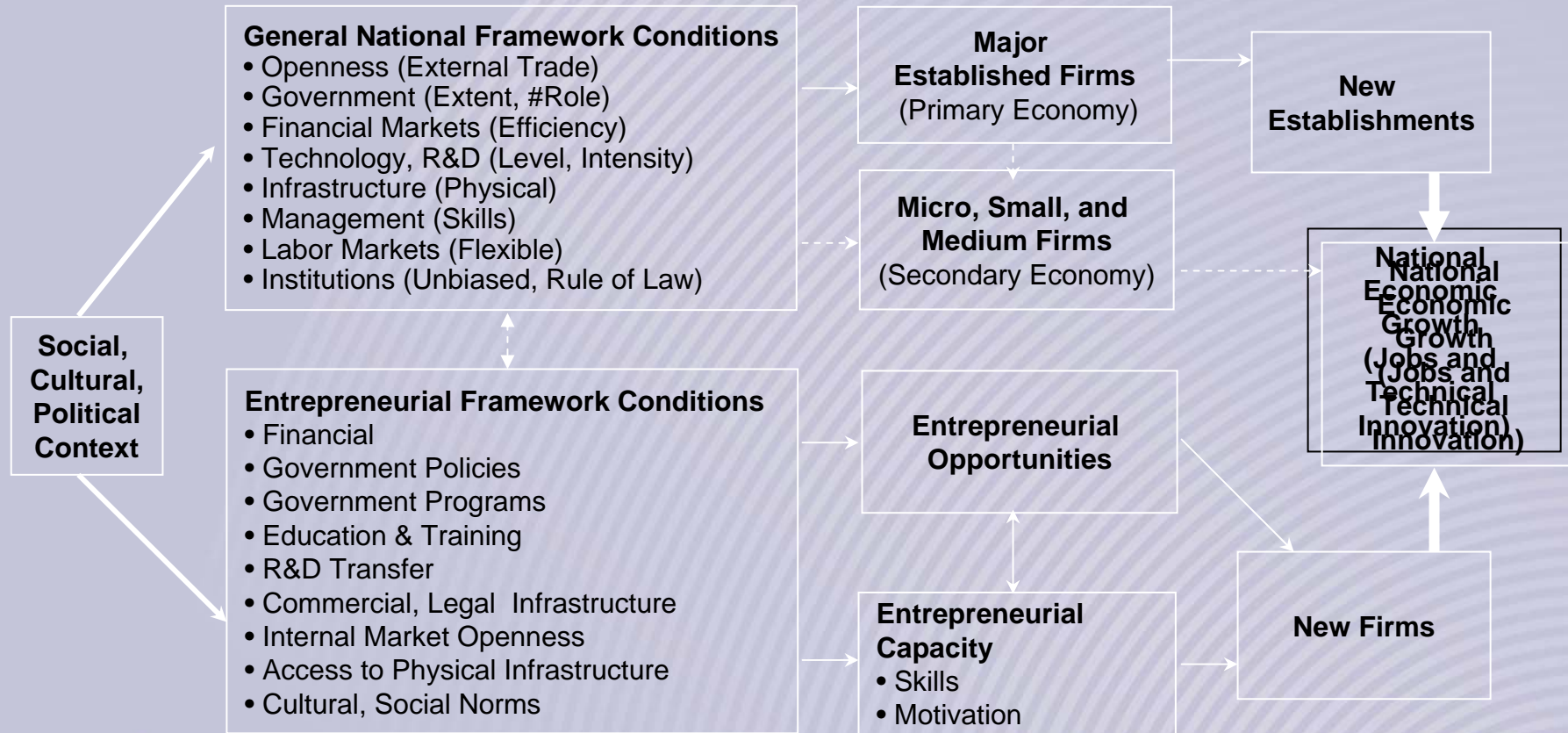
Figure B:
1995-96 Net Job Growth by Age and Type of Establishment



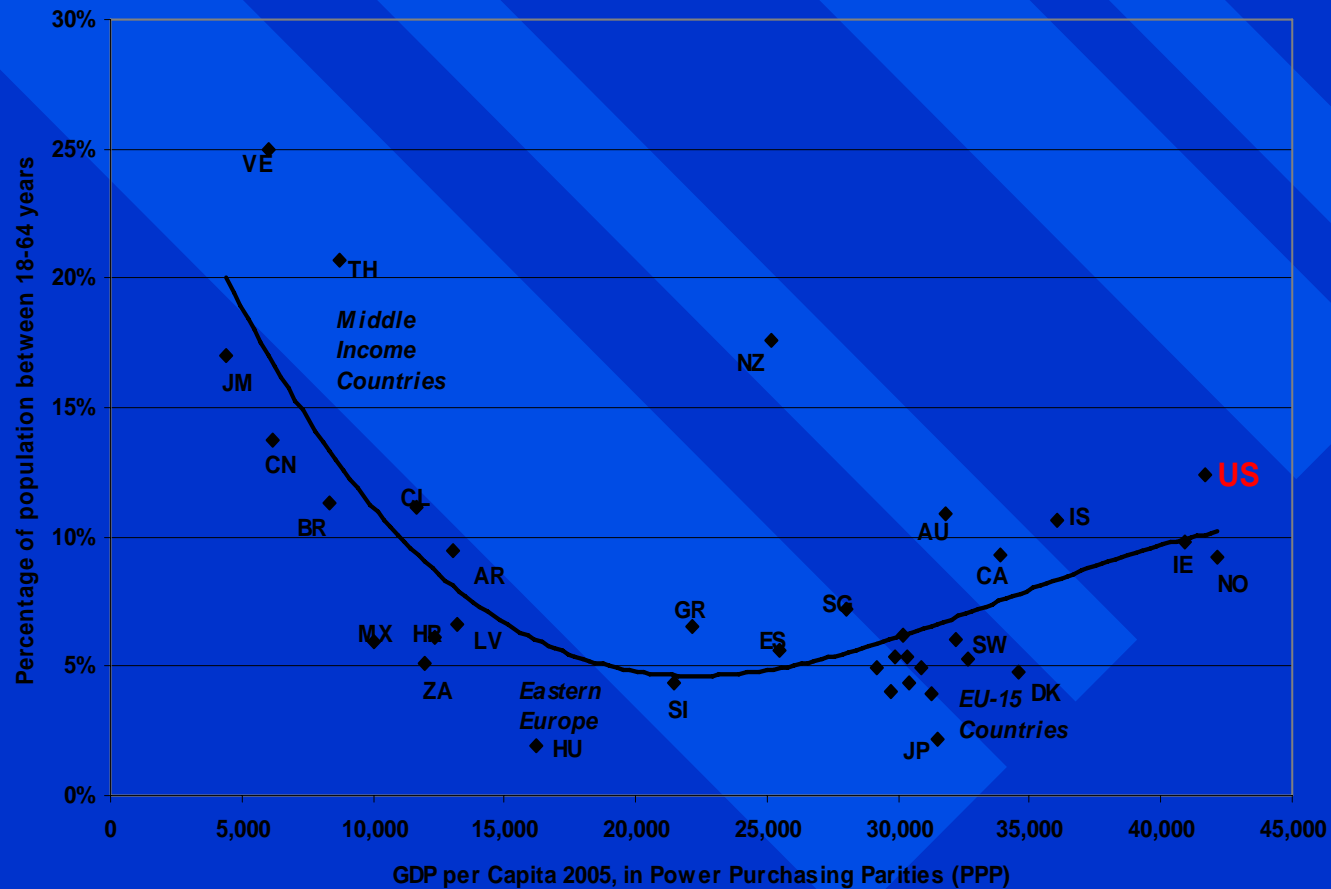
Classic Regional Development Theories: a summary

	<i>Community</i>	Affluent	Low Income
<i>Theory</i>			
Supply		Quality human capital Financial capital Infrastructure Leadership	Low quality human capital Limited Financial Capital Poor infrastructure Limited leadership
Demand		Strong export demand Backward linkages Tradable goods	Weak export demand Weak backward linkages Few Tradable goods

GEM Conceptual Model

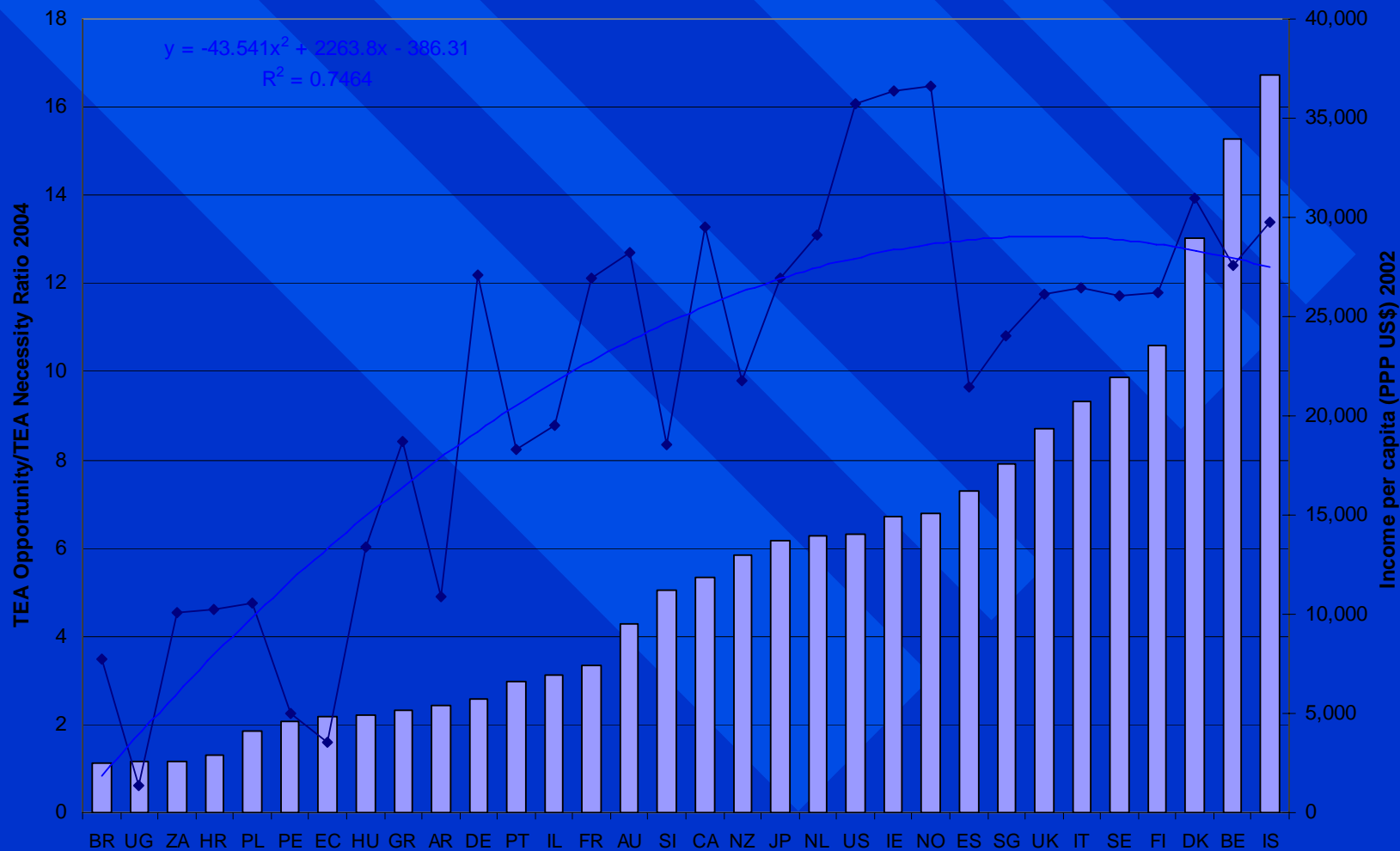


Early-Stage Entrepreneurial Activity, by Country and GDP



Opportunity Ratio

Opportunity ratio 2004 and GDP per capita (PPP) 2002



Data

- We have good data on establishments.
- We do not have good data on new establishments (plants and firms).
- We do not have good longitudinal data?
- Self employment, new firm start-ups.
- GEM data
- Registry Data -- a big question?