



ORGANISATION FOR ECONOMIC  
CO-OPERATION AND DEVELOPMENT



# Measuring Entrepreneurship

Everything You Ever Wanted to  
Know About the EIP

Eurostat-FORA Workshop on Entrepreneurship  
Indicators for R&D and Technology

Copenhagen, Oct. 30-31, 2008

Tim Davis  
OECD Statistics Directorate



ORGANISATION FOR ECONOMIC  
CO-OPERATION AND DEVELOPMENT



# Measuring Entrepreneurship

Everything You Ever Wanted to  
Know About the EIP  
.....and More

Eurostat-FORA Workshop on Entrepreneurship  
Indicators for R&D and Technology

Copenhagen, Oct. 30-31, 2008

Tim Davis  
OECD Statistics Directorate

## *Overview*

- Why measure Entrepreneurship
- Why measure Entrepreneurship internationally
- EIP is Entrepreneurship Indicators Programme
- OECD-Eurostat EIP (OEEIP)
- What is the EIP?      Who?      How?
- Model, Definitions, Framework and Measures
- Results and outputs of current phase
- Next steps and beyond

## *Importance of Entrepreneurship*

- Long recognized ..... but endogenous
- Policy interest only in latter part of 20<sup>th</sup> Century
- New, more productive firms enter
- Less productive firms leave
- Those remaining must improve
- Maybe.....
- But perhaps “entrepreneurship” too broad
- Not everyone starting a firm is “productive”
- SME  $\neq$  Entrepreneurship

## *Why Measure Entrepreneurship?*

- Researchers suggested:
  - “Understand and manage this “tool”
- And Policymakers took interest
- Many encouraged and tracked “start-ups”

# *Why Measure Entrepreneurship? Internationally*

- Researchers suggested:
  - “Understand and manage this “tool”
- And Policymakers took interest
- Many encouraged and tracked “start-ups”
- But “American” success eluded them
- Productivity gaps continued, and grew
- Global restructuring added pressures
- What are we missing?
- How can we be more like .... them



# *Genesis of Entrepreneurship Indicators Programme*

2004-2005

OECD statistical activity initiated by:

- Kauffman Foundation
- Danish-led Consortium (ICE)
- Can anybody produce better international entrepreneurship data ? Soon?

## *Phase I - Exploration*

- 2005: Kauffman Foundation: Feasibility Study
- What are needs and options?
- What role could an organisation like OECD play ?
- Eurostat was also exploring entrepreneurship
- Survey on Factors of Business Success (FoBS)
- ICE: Study on “official” Start-up Rates
- Can Business Demography data be improved?



## *Outcome of Feasibility Study*

- Entrepreneurship was a policy priority
- Limited involvement of NSOs
- Internationally-comparable measures are scarce
- Fundamental definitions and concepts missing
- Measures lacked Policy Context
- Need information on firms and entrepreneurs
- Basic business demography data incomparable
- Strong resistance to new firm surveys



## *OECD Proposed Phase II*

- Engage countries; Get NSOs involved
- Entrepreneurship Measurement Manual
- Gather data using existing and new sources
- Produce a regular Scoreboard or Compendium
- Make entrepreneurship data boring and routine
- Common language, terminology, measures
- Funders said: OK, but SOON!
- Launched “Programme” in 2006

## *Programme “Sponsors”*

- Kauffman Foundation
- ICE Consortium:
  - Canada
  - Denmark
  - Finland
  - Netherlands
  - Norway
  - United States
  
- Denmark
- Eurostat
- ...and the OECD

## *First Step – Engage participants*

- Engage countries and Int'l Organisations
  - International Steering Group
  - Policy and Statistical Experts
- Formal partnership with Eurostat



# *EIP Approach to Entrepreneurship Measurement*

- Definitions
- A Simple Theoretical Model
- A Framework of Indicators

## *EIP Definitions*

- Entrepreneurs: those persons (business owners) who seek to generate value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.
- Entrepreneurial activity: the enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets.
- Entrepreneurship is the phenomenon associated with entrepreneurial activity.

## *Some Important Principles*

- Entrepreneur vs. Entrepreneurship
- Not just small or young firms
- Not all firms are entrepreneurial
- They are doing something “new”
- Some entrepreneurs fail
- “Value” can be defined in different ways
- Indicators focus on business entrepreneurship

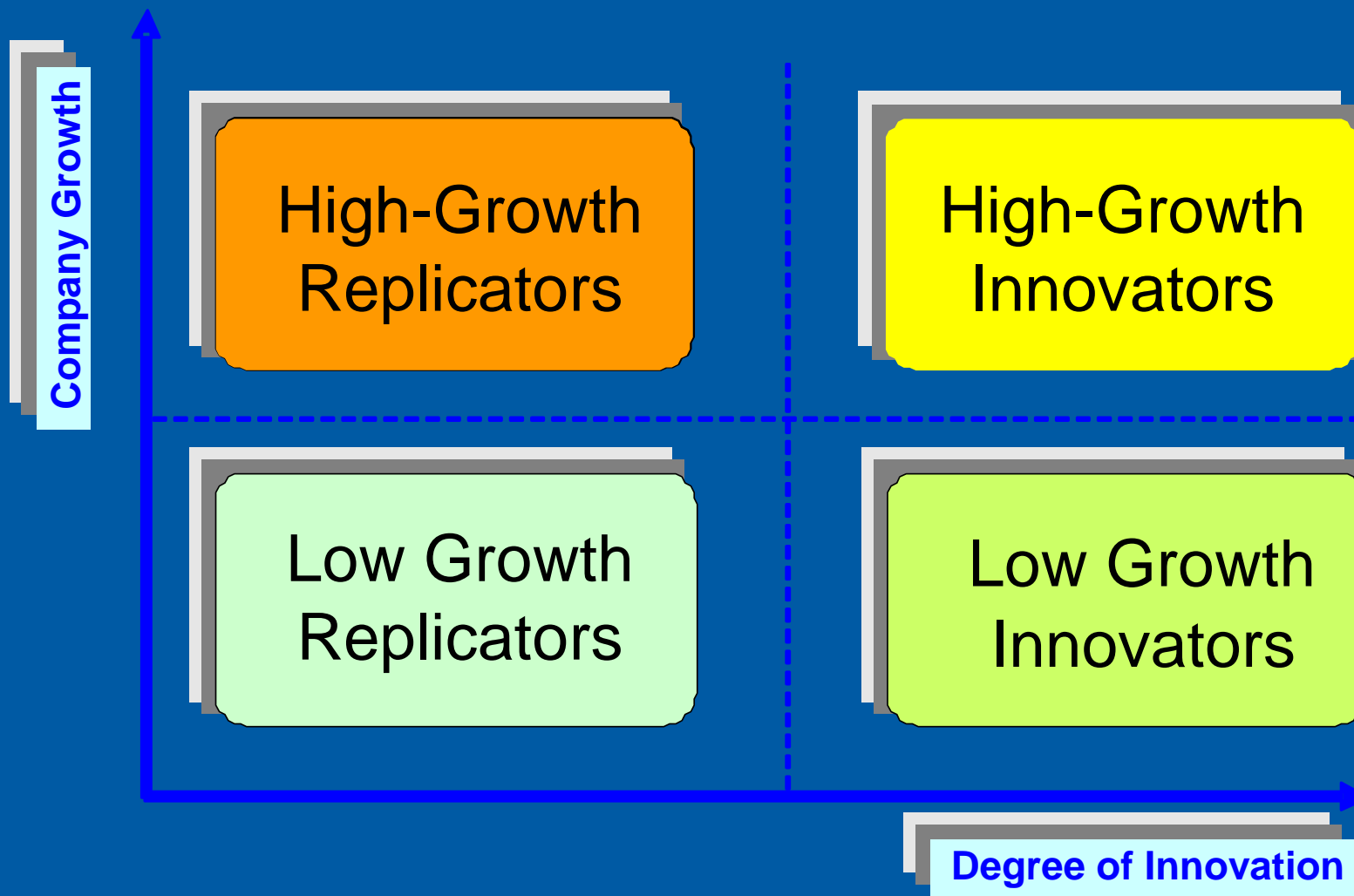
## *Definitions and Indicators*

- EIP offers broad definition of entrepreneurship
- No single measure perfectly reflects definition
- A variety of indicators required
- Distinguish aspects and types of entrepreneurship
- Employers vs. non-employers
- Measures of High Growth and Gazelles
- Innovative firms
- Exporting firms

For example.....

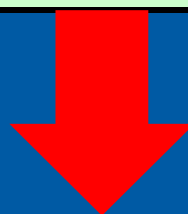


# *Sub-Dividing Entrepreneurial Firms*



# *A Simple Model of Entrepreneurship*

Determinants of Entrepreneurship



Entrepreneurial Performance



Impact of Entrepreneurship



# Model → Framework

## Determinants

## Entrepreneurial Performance

## Impact

Regulatory Framework

R&D and Technology

Entrepreneurial Capabilities

Firm-based Indicators

Job Creation

Culture

Access to Finance

Market Conditions

Employment-based Indicators

Economic Growth

Other Indicators of Entrepreneurial Performance

Poverty Reduction

# *EIP Approach to Entrepreneurship Measurement*

- Definitions
- A simple theoretical Model
- A Framework of Indicators
- Identified what analysts and policy makers wanted to know about entrepreneurial performance
- Then programme participants did the work to enable comparable measures
- Now we are repeating the process for Determinants
- Thus...timing is good for globalisation links

# Core Indicators

## Entrepreneurial Performance

Firm-based	Employment-based	Other
Employer firm birth rate	High Growth Firm Rate by Employment	High Growth Firm Rate by Turnover
Employer firm death rate	Gazelle Rate by Employment	Gazelle Rate by Turnover
Business churn	Ownership rate start-ups	Value-added by young firms
Net business population growth	Ownership rate business population	Productivity contribution, young firms
Survival rate, 3 and 5 years	Employment: 3 and 5 year old firms	Innovation Performance, young or small firms
Proportion 3 and 5 year survival	Average firm size after 3 and 5 years	Export Performance, Small firms

# *Entrepreneurship Measurement Manual*

- Boring but essential
  - Core Definitions
  - Framework for understanding and developing
  - Indicators and data specifications
- First step was *Eurostat-OECD Manual on Business Demography Statistics (2007)*
- Entrepreneurship Manual for 2009

## *Taking stock of progress...*

- Definitions and measurement framework
- NSOs and countries engaged
- Eurostat-OECD Business Demography Manual
- First round data collection
- We are making entrepreneurship data “routine”
- .....but not boring



## *Coming soon....*

- Digest of Entrepreneurship Indicators  
November 17, 2008
- Eurostat SiF Releases on Entrepreneurship
- Eurostat and OECD Databases:  
Entrepreneurship, Business Demography,  
Structural Business Statistics
- Joint Entrepreneurship Measurement Manual  
1<sup>st</sup> Half of 2009
- Compendium of Entrepreneurship Indicators  
2<sup>nd</sup> Half of 2009





## *Next steps*

- Engage more countries
- Encourage analytical activities
- Develop microdata-based indicators
- Develop Determinant Indicators
  - R&D and Technology
  - Access to Finance
  - Entrepreneurship Education
  - .....

# Determinants

Regulatory Framework	Market Conditions	Access to Finance	R&D and Technology	Entrepreneurial Capabilities	Culture
Administrative Burdens for Entry	Anti-Trust Laws	Access to Debt Financing	R&D Investment	Training and experience of entrepreneurs	Risk Attitude in Society
Administrative Burdens for Growth	Competition	Business Angels	University/ Industry Interface	Business and Entrepreneurship Education (skills)	Attitudes Towards Entrepreneurs
Bankruptcy Regulations	Access to the Domestic Market	Access to VC	Technological Cooperation Between Firms	Entrepreneurship Infrastructure	Desire for Business Ownership
Safety, Health and Environmental Regulations	Access to Foreign Markets	Access to Other Types of Equity	Technology Diffusion	Immigration	Entrepreneurship Education (mindset)
Product & Labour Market Regulations	Degree of Public Involvement	Stock Markets	Broadband Access		
Court & Legal Framework	Public Procurement		Patent System; Standards		
Social and Health Security					