

# CSPC 2013

The more we understand the innovator/entrepreneur  
the better we can develop policies to enhance innovation



Dr Loredana Marchetti,



**IDRC | CRDI**

International Development Research Centre  
Centre de recherches pour le développement international

**Canada**

# Addressing the need to know more about entrepreneurs/innovators around the world in an unique way

## HOW?

Rather than studying firms, or SMME's, **GEM studies the individual** in order to document the behavior and characteristics of

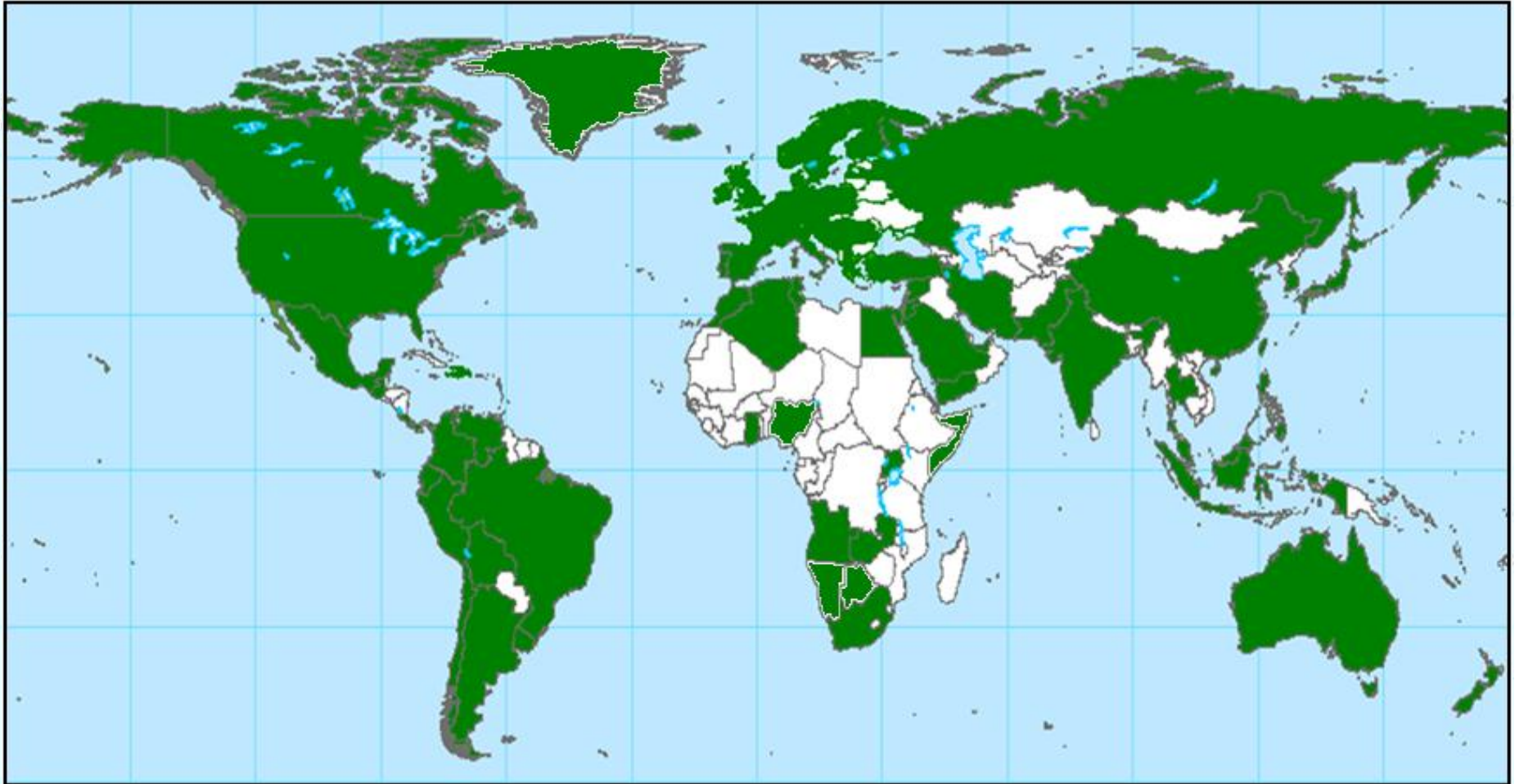
- nascent entrepreneurs,
- new entrepreneurs, and
- established business owners.

The degree of **innovativeness, competitiveness, and growth expectation** is studied, as well as the social environment and it's conduciveness to entrepreneurship.

# A project which has expanded rapidly

- **GEM was initiated in 1997**
  - Founding institutions: London Business School & Babson College in Boston
- **First GEM report in 1999**
  - 10 countries in 1999 (Canada among the first 10), 31 countries in 2003, 71 in 2013
  - GEM continues to expand
  - Over 100 countries involved between 1998 and 2013
  - Country micro-sites on [www.gemconsortium.org](http://www.gemconsortium.org)

# GEM in 2013





# What is the GEM study?

- Largest and longest longitudinal study of entrepreneurs in the world
- World's richest database on entrepreneurship
- Network of over 300 scholars and researchers in entrepreneurship from diverse geographies and economic development levels
- More than 169.000 individuals responded to the surveys in 2012, more than 2 Millions since the launch of the methodology



# How is data collected?

(a) surveys of the adult population (APS)

(b) in-depth interviews with national experts on entrepreneurship in each country (NES) ; and

(c) a wide selection of standardized national data.

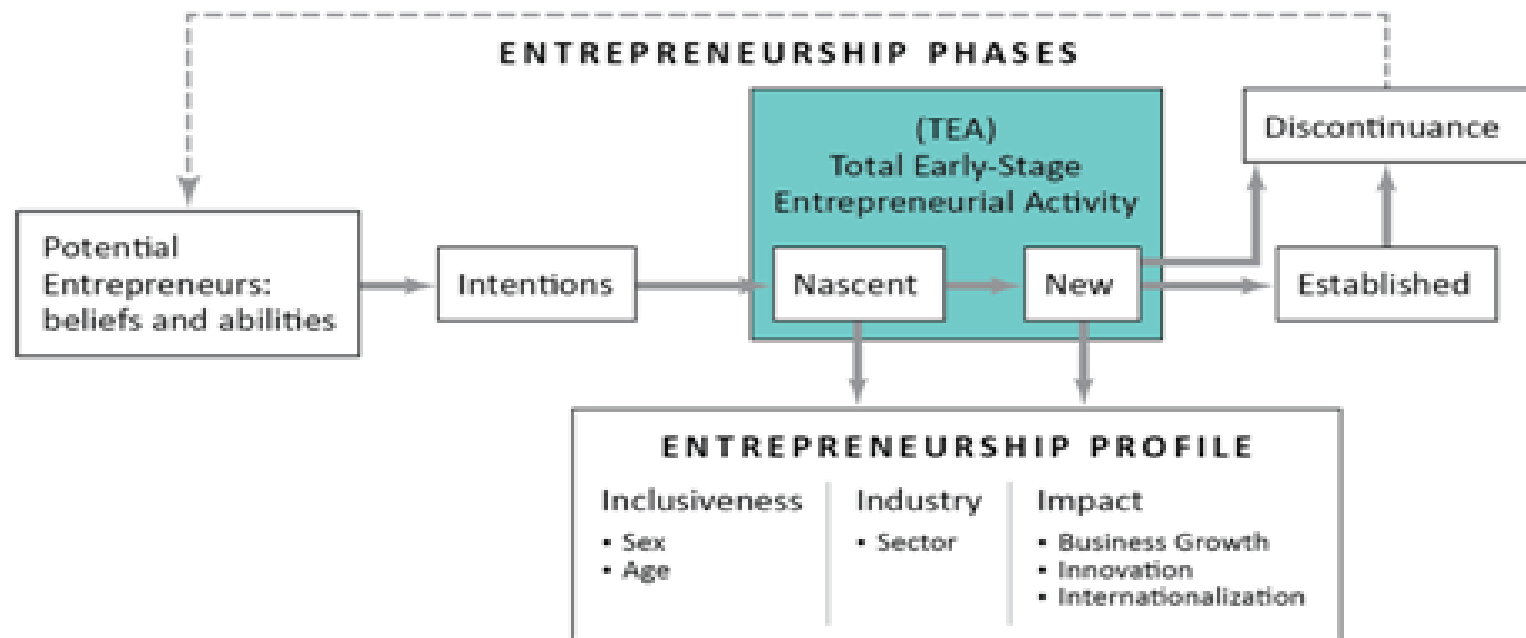


# GEM's Objectives

- To measure differences in the level of entrepreneurial activities among economies
- To uncover factors determining national levels of entrepreneurial activity
- To help identify policies that may enhance national levels of entrepreneurial activity

# Understanding the process

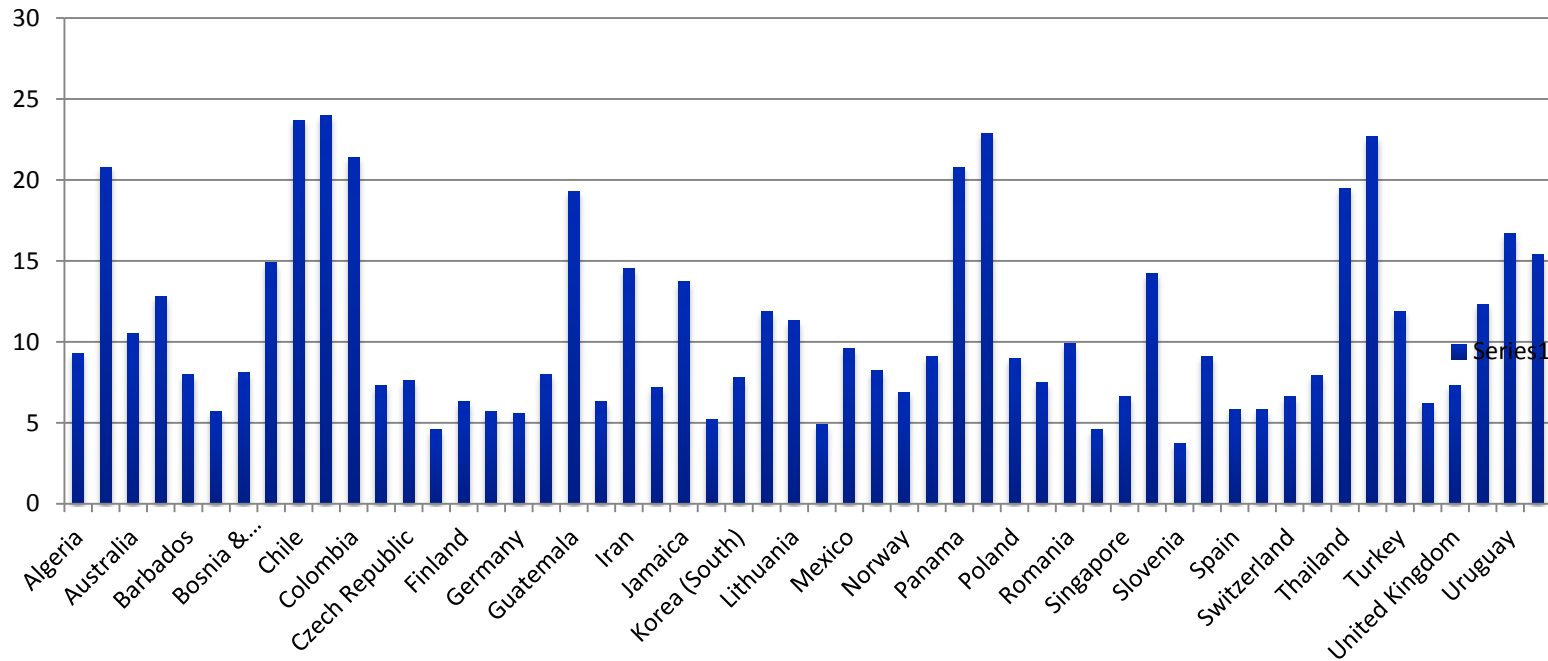
## Phases and Profile of Entrepreneurship





# Some findings across countries...

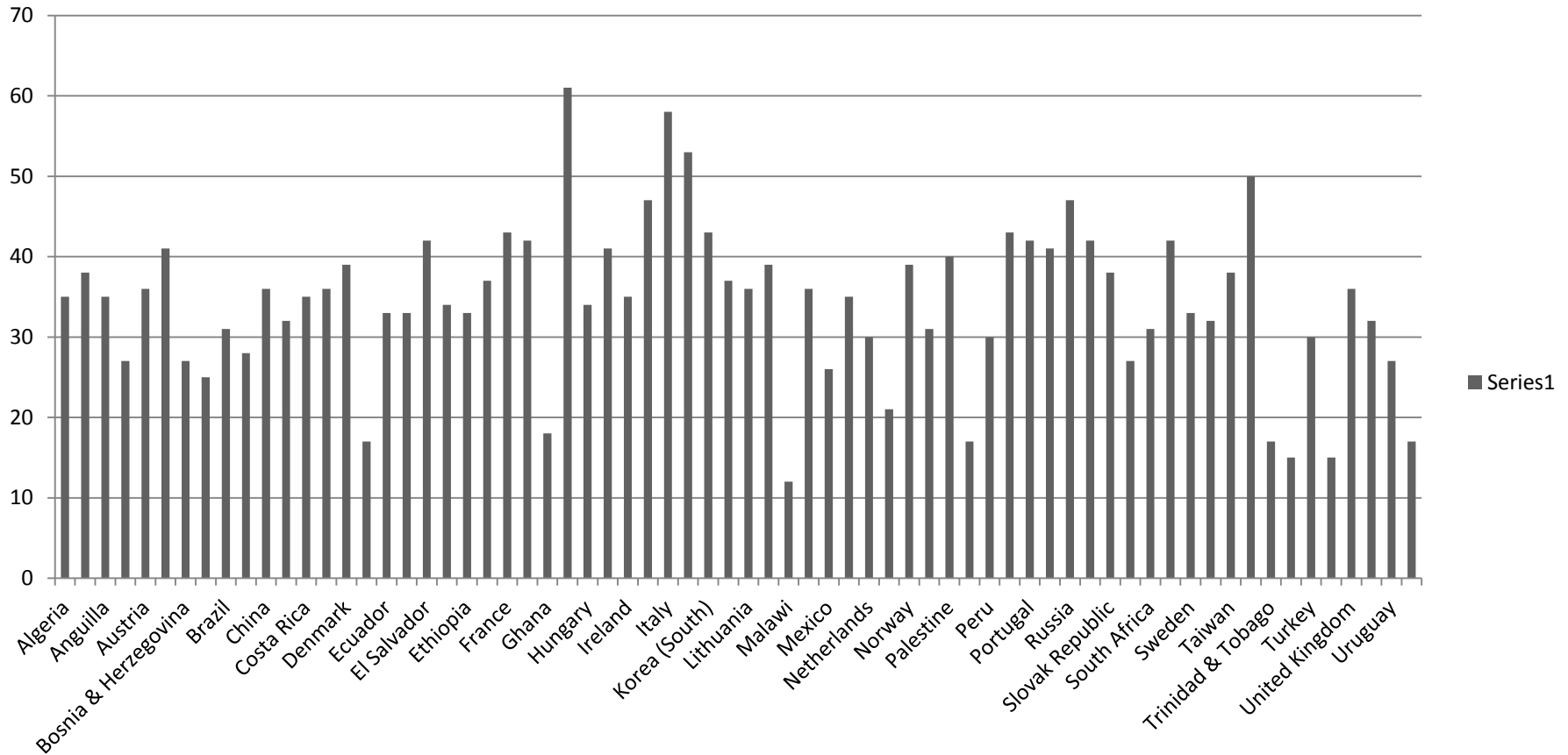
## “Entrepreneurial Intention”





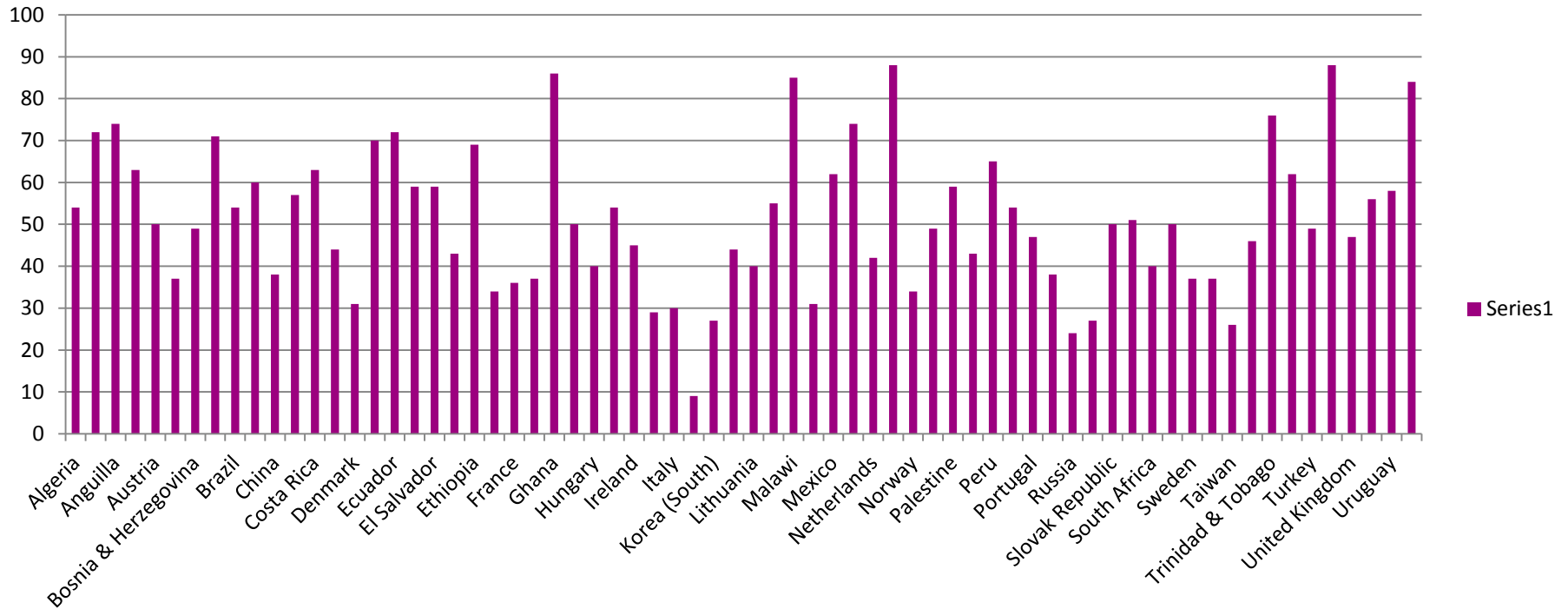
# Some findings across countries...

## “fear of failure”

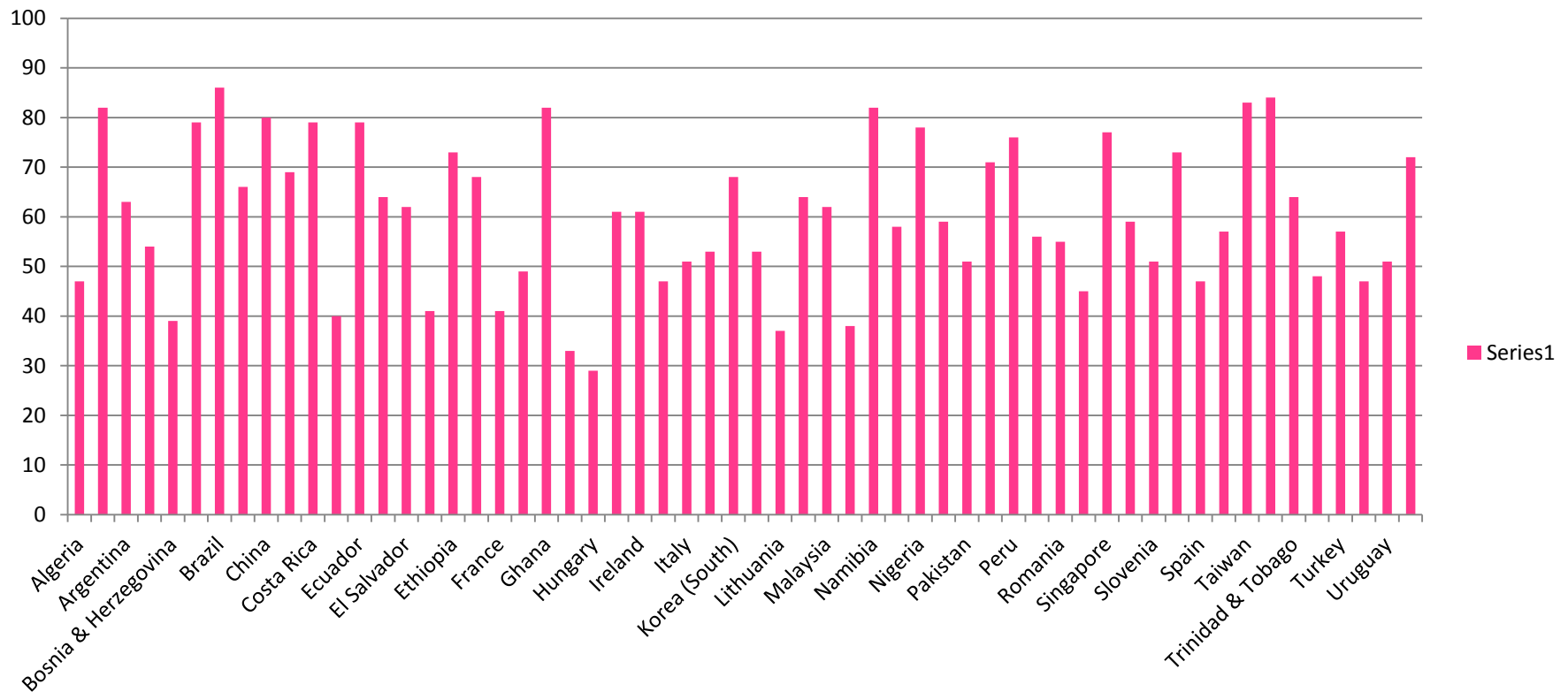




# Some findings across countries... “capabilities”



# Some findings across countries... “media attention”





# The key determinants of entrepreneurship were found to be

- (a) the perception of new business opportunities,
- (b) demographic characteristics and growth,
- (c) participation in postsecondary educational programs,
- (d) cultural and social values supportive of personal independence, and
- (e) a strong physical and professional infrastructure.



[GEM Special Report on Education and Training](#) In 2008 the Global Entrepreneurship Monitor set out to investigate the prevalence and sources of entrepreneurship education and training, and the effect of this training on starting a business.

[GEM SPECIAL REPORT ON ENTREPRENEURIAL EMPLOYEE ACTIVITY](#)



**GEM has developed a series of special reports on topics of interest: Youth, Women, Migration, Social Entrepreneurship,...**

## Other findings.....

|                                | South Africa | Angola | Ghana | Uganda | Zambia |
|--------------------------------|--------------|--------|-------|--------|--------|
| Days to start a business       | 22           | 68     | 12    | 25     | 18     |
| Procedures to start a business | 6            | 8      | 7     | 18     | 6      |

GEM **studies the environment** and measures its influence on the level of entrepreneurial activity as well as looking at those factors which damped such activity



## Other studies: Sub-Saharan African Study

- Massive 3 year study project financed by the IDRC of Canada involving 10 sub-Saharan African countries – Angola, Botswana, Ethiopia, Ghana, Malawi, Namibia, Nigeria, South Africa, Uganda and Zambia looking at
  - entrepreneurial levels, attitudes, perceptions and intentions amongst the adult population; and
  - the youth of these countries who represent between 40% and 45% of the total population. 60% of them are unemployed or under employed.



# Other studies: GEM Canada and the world

- “Compare and contrast” studies

Grants to visiting scholars to come to Canada to research on issues of common interest with GEM Canada institutions.

In 2013, Mexican visiting scholar

- Collaboration to be developed in 2015-2016 with Indonesia and Vietnam
- Mentoring for French-speaking West African countries to carry out the GEM surveys, data analysis and dissemination to international conferences



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Thank you



International Development Research Centre  
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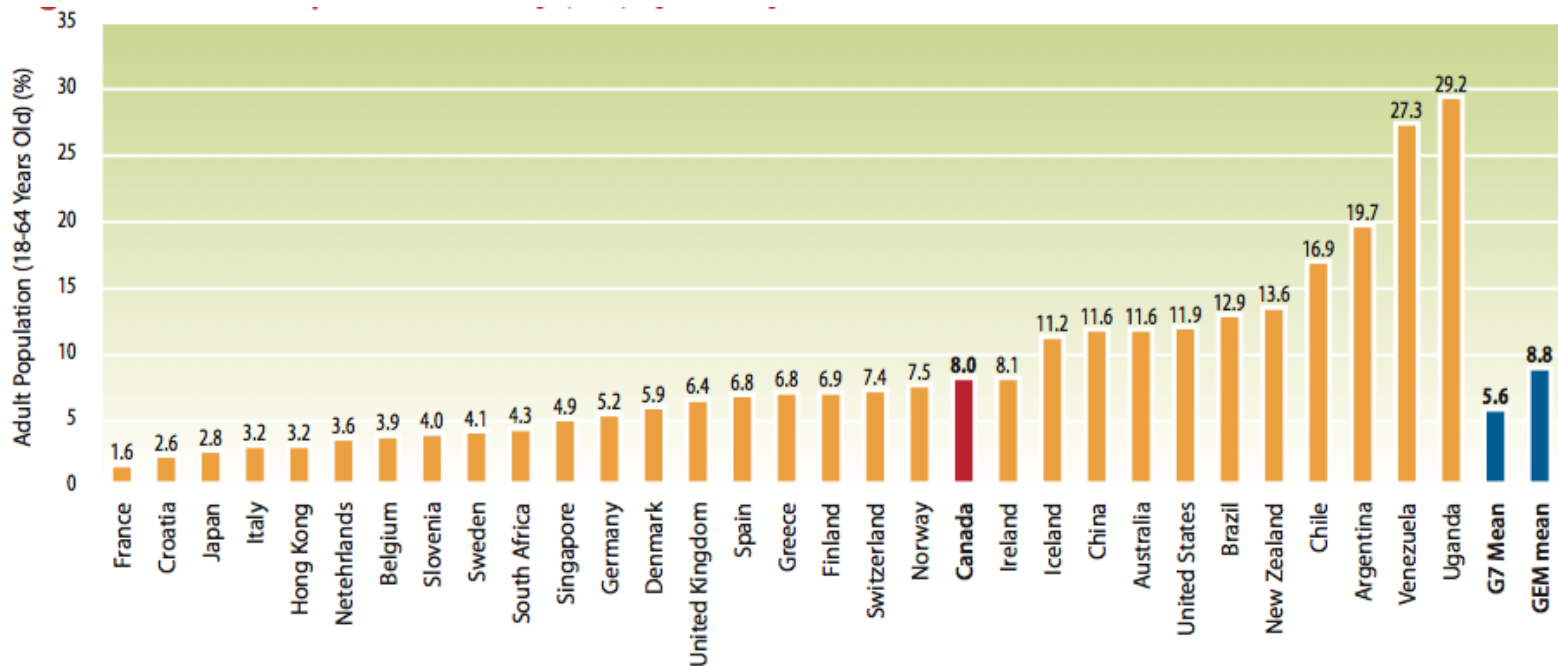


Who are the innovators and what do we know about the individuals who drive innovation?

Chad Saunders, MBA, PhD

Who are entrepreneurs/innovators  
in Canada and what are the  
demographics?

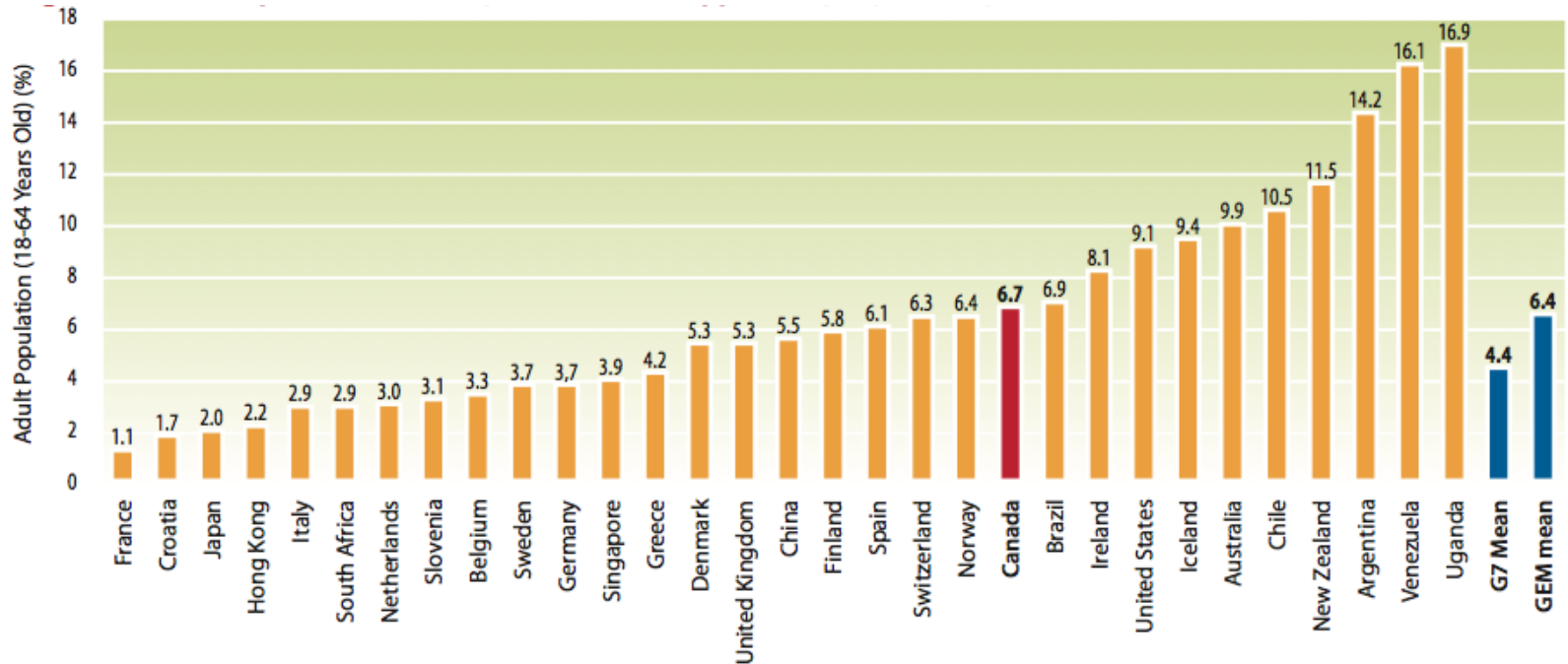
# What We Were (GEM 2003)



## Total Entrepreneurial Activity by Country

Source: GEM National Report 2003

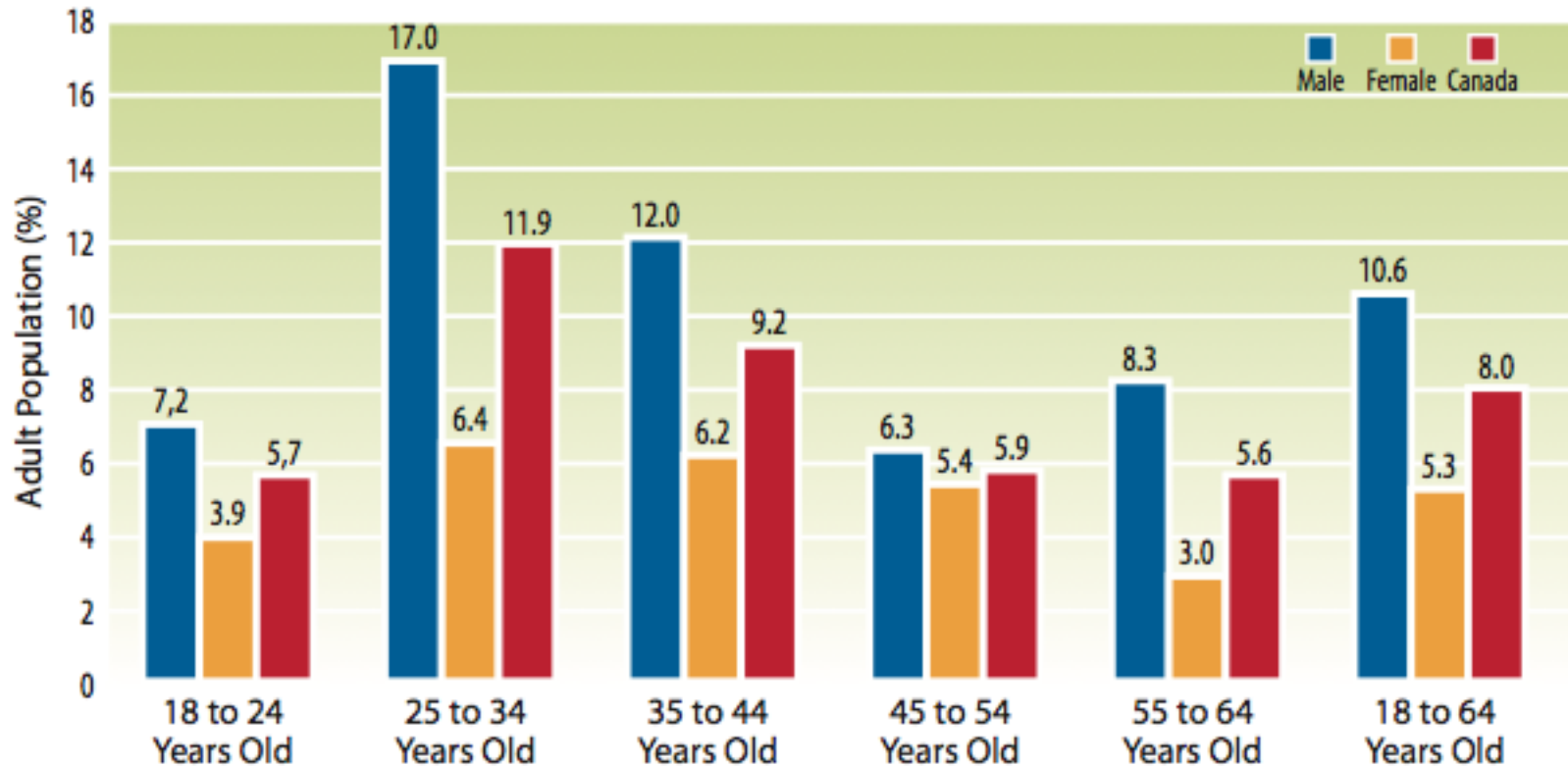
# What We Were (GEM 2003)



## Entrepreneurial Activity (Motivation: Opportunity) by Country

Source: GEM National Report 2003

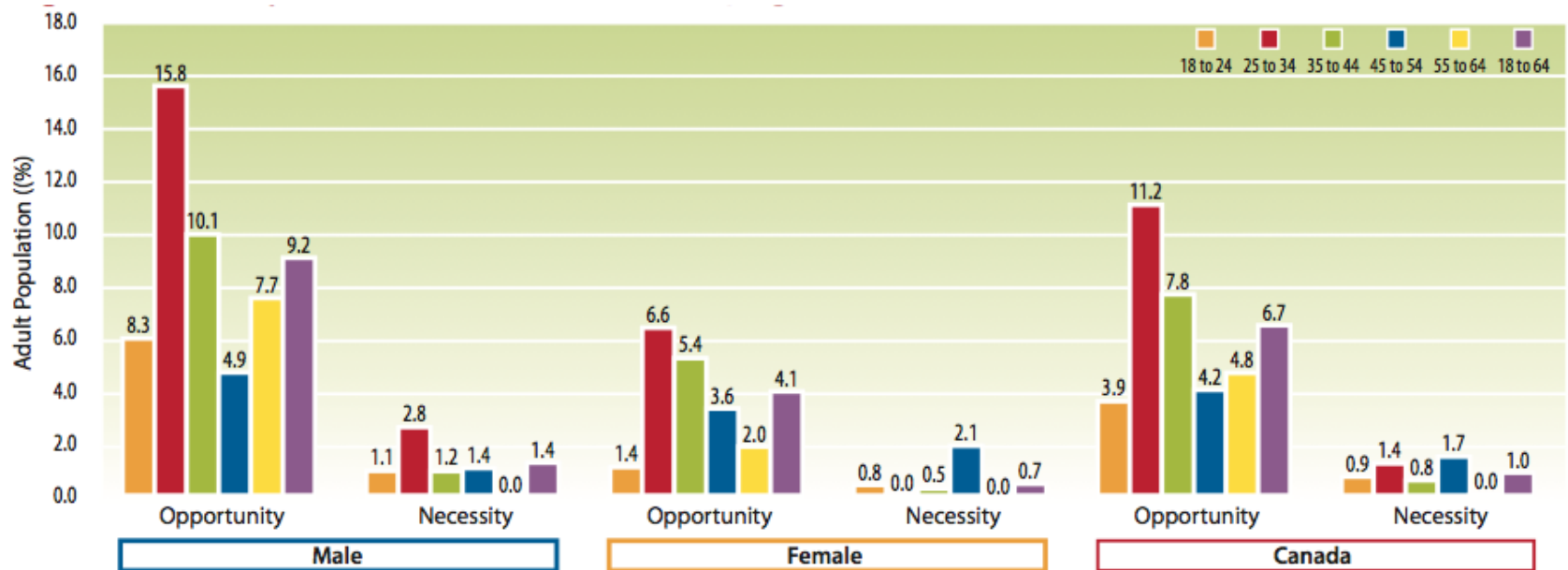
# What We Were (GEM 2003)



## Total Entrepreneurial Activity by Age and Gender

Source: GEM National Report 2003

# What We Were (GEM 2003)

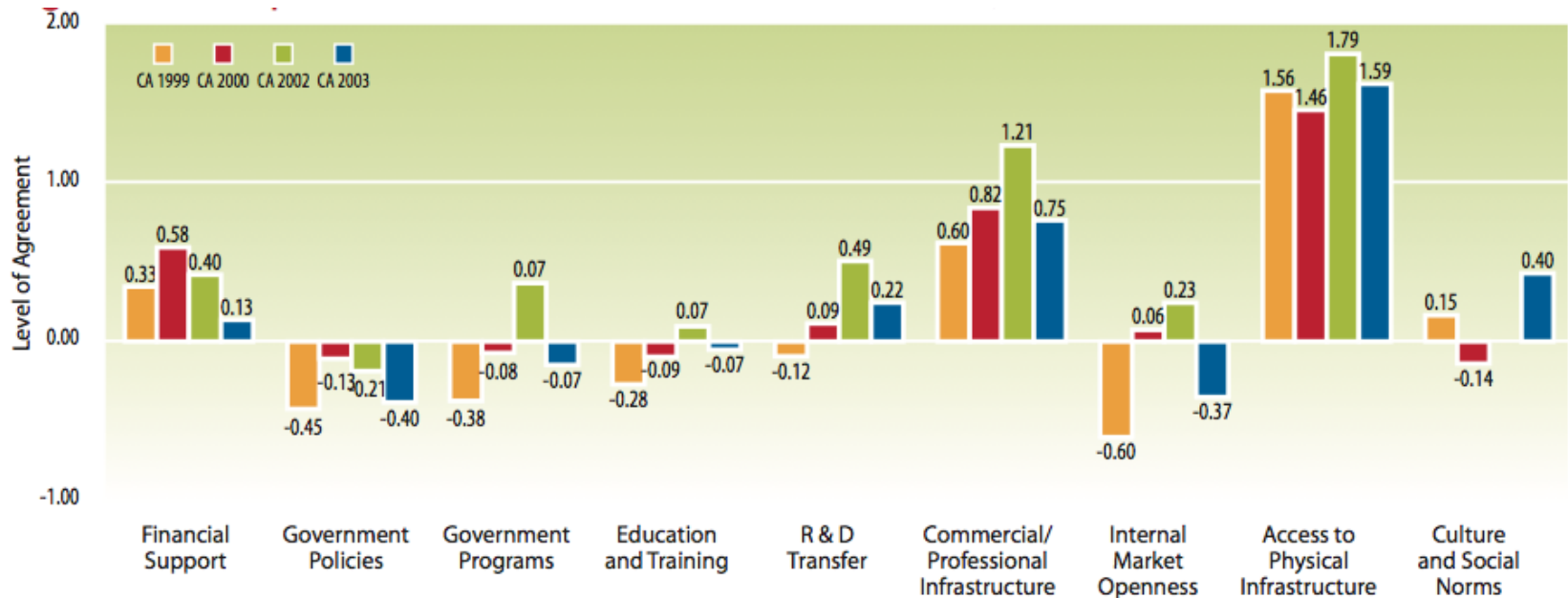


## Entrepreneurial Activities (Motivation) by Age and Gender

Source: GEM National Report 2003



# What We Were (GEM 2003)



## Entrepreneurial Framework Conditions in Canada

Source: GEM National Report 2003

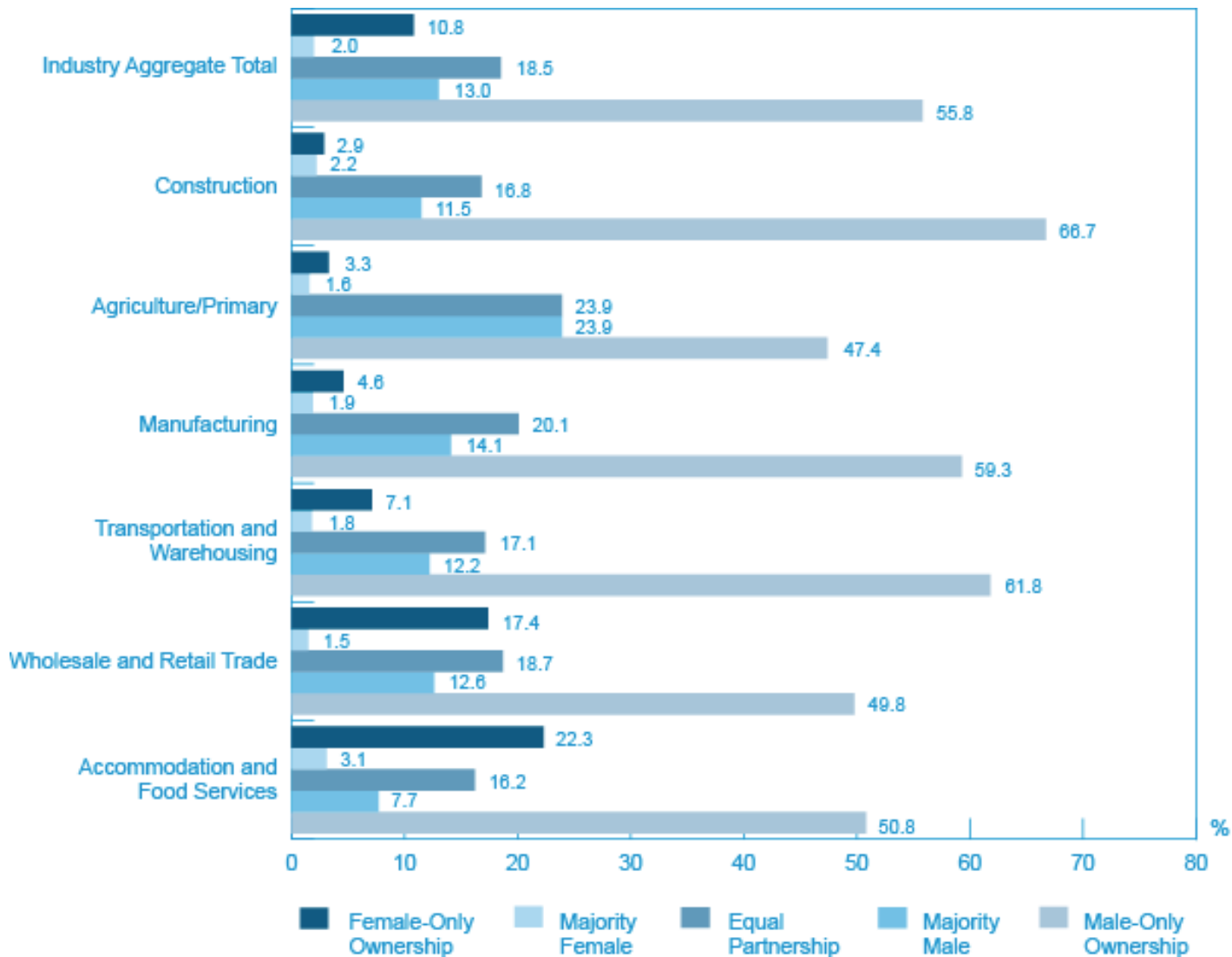
# Demographics - Startups

- Half a million Canadians in the process of starting their own business
- 50% survive after 5 years
- Startup activity lead by BC, AB, SK
- Focal sectors: Education, science, health and trades
- ~20% necessity entrepreneurs
- 70% of startup by men but growing percentage of established entrepreneurs are women (27/32/33%)
- Higher education levels (1 in 3 with university degree; double the rate in 1990)
- Fastest growing segment is the >50 age group (~30% of total startups)

Source: CIBC 2012; Statistics Canada

# Startups - Future

- Increased export orientation
  - Younger businesses more export oriented (2-5 yr olds > 50% foreign revenue)
  - 20% of self employed are immigrants
  - Increased competition and pressure in terms of pricing, quality, cost control, efficiency, marketing
  - More awareness of trade, tax and other regulations for foreign trade needed; understanding of currency exchange risks
- Technology and Network Structures
  - Driven by innovation (markets vs. firms)
  - Intrapreneurs
  - Outsourcing and Personalized Products/Services
- Social Entrepreneurship



Source: Survey on Financing and Growth of Small and Medium Enterprises, 2011; Industry Canada

# Rapid Growth by Industry

| Sector                                       | Number of Firms |
|--|-----------------|
| IT Products and Services                     | <u>79</u> ←     |
| Manufacture and Distribute Business Products | 59              |
| Construction                                 | 42              |
| Software Developers                          | <u>35</u> ←     |
| Marketing and Media                          | 45              |
| Human Resources Services                     | 28              |
| <i>New Industries</i>                        | <u>41</u> ←     |
| Consumer Products                            | 29              |
| Financial Services                           | 24              |
| Retail                                       | 20              |
| Food Processing and Distribution             | 18              |
| Natural Resources Extraction and Services    | 18              |
| Consumer Services                            | 17              |
| Transportation and Logistics                 | 16              |
| Education and Certification                  | 14              |
| Communications                               | 8               |
| Pharma and Nutraceuticals                    | 7               |

23%  
purely  
hitech

Didn't  
exist  
before

Source:  
PROFITguide.co  
m June 2013

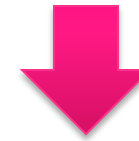
# Rapid Growth by Location

| Urban Centre    | Number of Firms |
|-----------------|-----------------|
| Toronto         | 187             |
| Vancouver       | 60              |
| Montreal        | 46              |
| Calgary         | 42              |
| Edmonton        | 24              |
| Ottawa-Gatineau | 19 (364 or 73%) |

Source: PROFITguide.com June 2013

- Average Profit 500 exporter generated 43% of sales abroad; 60 companies 90% of their business in foreign markets
- Average age is 14 years; 366 tapped founders for additional funds over past 5 years

# Canada's Top Entrepreneurial Cities



| 2012 Rank |                 | Overall Score<br><i>0-100</i> | Relative Strengths      |                            |                       | 2<br>F |
|-----------|-----------------|-------------------------------|-------------------------|----------------------------|-----------------------|--------|
|           |                 |                               | Presence<br><i>0-25</i> | Perspective<br><i>0-35</i> | Policy<br><i>0-40</i> |        |
| 1         | Grande Prairie  | 65                            | 17                      | 23                         | 25                    |        |
| 2         | Saskatoon       | 64                            | 13                      | 22                         | 29                    |        |
| 3         | Regina          | 62                            | 11                      | 25                         | 26                    |        |
| 4         | Moose Jaw       | 61                            | 12                      | 19                         | 30                    |        |
| 5         | Lloydminster    | 60                            | 13                      | 18                         | 29                    |        |
| 6         | Red Deer        | 60                            | 12                      | 21                         | 27                    |        |
| 7         | Prince Albert   | 59                            | 11                      | 18                         | 30                    |        |
| 8         | Edmonton        | 59                            | 15                      | 19                         | 25                    |        |
| 9         | Lethbridge      | 59                            | 15                      | 19                         | 25                    |        |
| 10        | St. John's      | 57                            | 9                       | 22                         | 26                    |        |
| 11        | Saint-Georges   | 57                            | 11                      | 21                         | 25                    |        |
| 12        | Saint-Hyacinthe | 57                            | 12                      | 22                         | 23                    |        |
| 13        | Calgary         | 57                            | 16                      | 20                         | 21                    |        |
| 14        | Wood Buffalo    | 55                            | 10                      | 21                         | 24                    |        |
| 15        | Victoriaville   | 54                            | 11                      | 18                         | 25                    |        |
| 16        | Sudbury         | 54                            | 10                      | 20                         | 24                    |        |
| 17        | Québec          | 54                            | 11                      | 23                         | 20                    |        |
| 18        | Alma            | 53                            | 11                      | 17                         | 25                    |        |
| 19        | Shawinigan      | 53                            | 11                      | 17                         | 25                    |        |
| 20        | Drummondville   | 53                            | 12                      | 16                         | 25                    |        |

68%  
75%

Source:  
Canadian  
Federation of  
Independent  
Business  
2012

| Ranking | Access to funding | Score | Entrepreneurship culture | Score | Tax and regulation | Score | Education and training | Score | Coordinated support | Score |
|---------|-------------------|-------|--------------------------|-------|--------------------|-------|------------------------|-------|---------------------|-------|
| 1       | United States     | 7.12  | United States            | 7.67  | Saudi Arabia       | 6.40  | France                 | 6.58  | Russia              | 6.23  |
| 2       | United Kingdom    | 6.86  | South Korea              | 7.53  | Canada             | 6.34  | Australia              | 6.53  | Mexico              | 5.89  |
| 3       | China             | 6.75  | Canada                   | 7.45  | South Korea        | 6.34  | United States          | 6.50  | Brazil              | 5.87  |
| 4       | Canada            | 6.62  | Japan                    | 7.28  | United Kingdom     | 6.19  | South Korea            | 6.40  | Indonesia           | 5.84  |
| 5       | Australia         | 6.48  | Australia                | 7.18  | South Africa       | 6.10  | EU                     | 6.25  | India               | 5.76  |
| 6       | South Africa      | 5.95  | United Kingdom           | 7.00  | Japan              | 6.07  | United Kingdom         | 5.98  | China               | 5.75  |
| 7       | Japan             | 5.81  | Germany                  | 6.88  | Germany            | 5.84  | Germany                | 5.89  | Turkey              | 5.66  |
| 8       | South Korea       | 5.75  | EU                       | 6.07  | Australia          | 5.75  | Argentina              | 5.85  | South Africa        | 5.65  |
| 9       | Brazil            | 5.67  | France                   | 5.68  | Russia             | 5.65  | Canada                 | 5.81  | Argentina           | 5.64  |
| 10      | Indonesia         | 5.53  | Russia                   | 5.05  | EU                 | 5.48  | Brazil                 | 5.78  | Germany             | 5.53  |
| 11      | India             | 5.48  | India                    | 4.95  | Turkey             | 5.45  | South Africa           | 5.67  | France              | 5.41  |
| 12      | EU                | 5.41  | Brazil                   | 4.88  | Indonesia          | 5.38  | Saudi Arabia           | 5.66  | Saudi Arabia        | 5.39  |
| 13      | Saudi Arabia      | 5.25  | Italy                    | 4.67  | United States      | 5.33  | Italy                  | 5.47  | EU                  | 5.37  |
| 14      | Germany           | 5.23  | South Africa             | 4.33  | Mexico             | 5.21  | Russia                 | 5.46  | South Korea         | 5.36  |
| 15      | Russia            | 5.04  | Turkey                   | 4.30  | France             | 5.12  | Mexico                 | 5.32  | Australia           | 5.31  |
| 16      | France            | 4.74  | Argentina                | 4.06  | China              | 5.07  | Japan                  | 4.72  | Canada              | 5.29  |
| 17      | Turkey            | 4.57  | Mexico                   | 3.96  | Brazil             | 4.83  | Turkey                 | 4.39  | United Kingdom      | 5.19  |
| 18      | Mexico            | 4.42  | China                    | 3.88  | Italy              | 4.76  | China                  | 4.35  | Japan               | 5.04  |
| 19      | Italy             | 4.03  | Indonesia                | 3.80  | India              | 4.39  | Indonesia              | 3.88  | Italy               | 4.97  |
| 20      | Argentina         | 3.27  | Saudi Arabia             | 3.38  | Argentina          | 4.31  | India                  | 3.49  | United States       | 4.85  |

Source: EY G20  
Entrepreneurship Barometer



# GEM 2013+ Contributions

- Comparison to 2003 situation (10 year gap filled)
- International comparison
- Expanded view of seniors role (18-99)
- Improved policy focus of GEM Canada team
- Finer granularity on regional differences in terms of the scope and diversity of entrepreneurship across Canada
- Social entrepreneurship and intrapreneurship for 2014

# Thank you

Questions?

[chad.saunders@haskayne.ucalgary.ca](mailto:chad.saunders@haskayne.ucalgary.ca)

# Who are the innovators and what do we know about the individuals who drive innovation?

CSPC Theme: Private Sector R&D and Innovation: New Realities and New Models  
J. Adam Holbrook, P.Eng.  
Associate Director,  
Centre for Policy Research on Science and Technology,  
Simon Fraser University  
Vancouver, BC

# Panelists

- Ms. Loredana Marchetti, IDRC
- Ms. Colleen McMorrow, Ernst & Young
- Prof. Chad Saunders, University of Calgary
- Ms. Cynthia-Ann Sheehan, Université Laval
  
- Chair: Prof. Adam Holbrook, Simon Fraser University

# The Challenge (1)

- Innovation is the principal driver of wealth creation and social development in society, and the individual who is the agent of innovation, whether in a small company or a large organization, public or private, can be thought of as an entrepreneur.
- Following Schumpeter's definition of innovation, an entrepreneur is automatically an innovator. Innovation by institutions, particularly businesses, is widely studied, but little is known about innovators themselves.

# The challenge (2)

- Innovation is not something confined to the private sector – governments, universities, health care institutions are all centres of innovation – even if these innovations cannot be measured in financial terms.
- Innovations that have social benefits, rather than monetary value can be found in every sector.
- The more we understand the innovator/entrepreneur as an individual the

# Background – Global Entrepreneurship Monitor (GEM)

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- The GEM Consortium was set up in 1999 to collect data on entrepreneurship around the world and report it on a comparative basis. Canada was a member 1999 – 2003, but then resigned (lack of funding)
- IDRC has funded the Canadian national effort for 2013 – 2015
- Several provinces have funded additional data collection (over-sampling) – BC, AB, SK, MB, ON, QC and NL

# The GEM surveys

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- The Adult Population Survey (APS), in each national program, surveys 2000 respondents, balanced for age, gender and region
- The seven participating provinces sponsored additional sampling to get to get a statistically significant total for each province. Thus the BC component for the Canadian core program is 264 responses. An additional 122 responses were obtained to get a statistically significant total of 386
- The National Experts Survey (NES) is a set of a minimum 36 directed interviews at the national level. The interviewees are recruited by the project investigators and are not age/gender balanced. The survey was repeated for each participating province



# Questions for discussion

- Who are entrepreneurs/innovators in Canada (and what are the demographics)?
- What is a social entrepreneur, and who are they?
- What is an *intrapreneur* and who are they?
- How can the Global Entrepreneurship Monitor (GEM) contribute to a better understanding of Canada by emerging economies? How important it is that Canada develop ongoing entrepreneurial and innovation relationships with emerging economies?

# What is Intrapreneurship?

## Igniting Innovation and The EY G20 Entrepreneurship Barometer 2013

Presented by:

**Colleen McMorro**

Partner and National and Ontario  
Director, Entrepreneur Of The Year  
Program



Building a better  
working world

# Igniting innovation

How hot companies fuel growth  
from within



**“Entrepreneurial thinking is not optional. Those who stand still fall behind, and market leadership changes regularly.**

**This is why it’s important for all companies — even large, established corporations — to cultivate innovation through intrapreneurship.”**

# Some questions we asked of leading innovative CEOs and academics

- What are the ingredients of successful corporate entrepreneurship?
- How do companies fan the flames of innovation by tapping into the creativity of their employees?
- What practical strategies can companies adopt to foster a culture of innovation?  
How can they establish and sustain

# The answer: companies must *institutionalize entrepreneurship*

- ▶ Set up a formal structure for intrapreneurship.
  - ▶ Ask for ideas from your employees.
  - ▶ Assemble and unleash a diverse workforce.
  - ▶ Design a career path for your intrapreneurs.
  - ▶ Explore government incentives for innovation.
  - ▶ Prepare for the pitfalls of intrapreneurship.
- Based on a survey of survey of 263 of the world's leading entrepreneurs (all winners of EY's Entrepreneur Of The Year awards)

**77%** have an unstructured, free-flowing process to innovation

**85%** strongly agree that innovation is critical to the growth of their organization

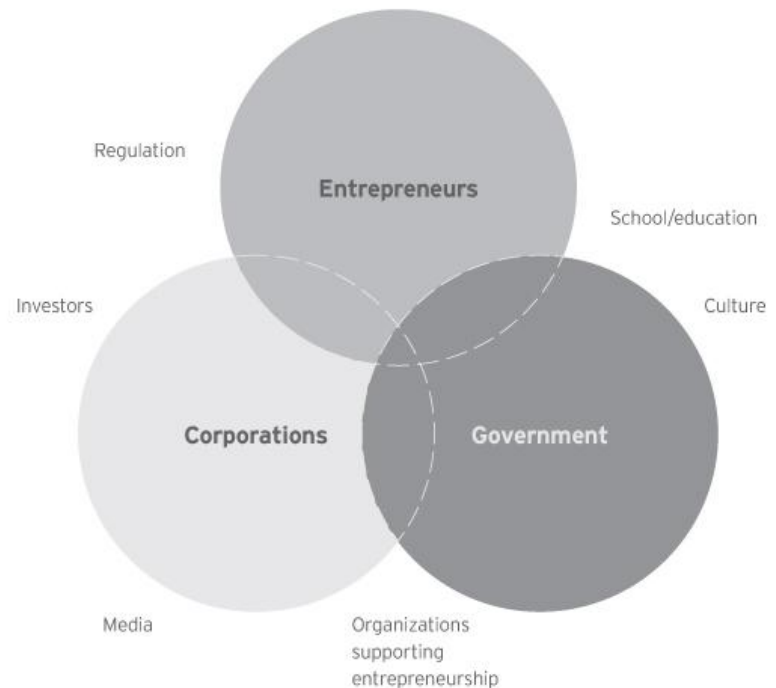
# Innovation = growth, but...

- According to our survey of 263 Ernst & Young Entrepreneur Of The Year® award winners: 82% agreed strongly that the ability to innovate was critical to the growth of their organizations
- But innovation demands a loose, agile organizational structure
- Large companies are often rigid and hierarchical
- Nearly half of survey respondents said innovation got harder as their organizations

# Supporting entrepreneurship — a G20 imperative

- Entrepreneurs create jobs and drive growth.
- Today, their contribution is more important than ever.
- But they need to be given the tools and environment that will enable them to succeed.

**The power of three — governments, entrepreneurs and corporations need to work together to foster sustainable growth.**





# Introducing...

# EY G20 Entrepreneurship

# Barometer 2013

**The entrepreneurial development framework:  
five pillars that foster entrepreneurship**





# Overall country rankings

The following represents the overall ranking of the G20 countries by quartile.\*

*Quartile 1 represents the countries that are leading in fostering entrepreneurship.*

*Each of the five pillars (Access to funding, entrepreneurship culture, tax and regulation, education and training, coordinated support) was weighted equally to provide an overall country ranking.*

| Quartile 1     | Quartile 2   | Quartile 3   | Quartile 4 |
|----------------|--------------|--------------|------------|
| Australia      | EU           | Brazil       | Argentina  |
| Canada         | France       | China        | India      |
| South Korea    | Germany      | Mexico       | Indonesia  |
| United Kingdom | Japan        | Russia       | Italy      |
| United States  | South Africa | Saudi Arabia | Turkey     |

\* Note:  
Countries are listed  
in **alphabetical  
order** per quartile.

# Access to funding

Canada ranking: 4

## Key Insights:

- Canadian entrepreneurs find access to funding easier than most of their peers in other G20 nations.
- 45% say access has improved, compared to 35% across the G20 as a whole.
- The Cdn Government Economic Action Plan 2013 includes \$400m of new funding for the venture capital sector.

## A call to action:

- ▶ 73% of entrepreneurs in Canada say access to funding remains difficult, slightly more than the G20 average (70%).
- ▶ The increased support for domestic venture capital will have to compensate for a 22% fall in foreign venture capital investment, according to the Canadian Venture Capital Association.
- ▶ The survey results suggest funding is less likely to be available from customers or suppliers, and that bank funding is recovering more slowly than in other countries.

# Entrepreneurship culture

Canada ranking: 3

## Key insights:

- Low cost of insolvency in Canada — the lowest in the G20.
- Canada fosters a culture of research and innovation.
- Since 2006, Canada has invested C\$9b in funding for science, technology and innovation, and further support has been made available for R&D in higher education.

## Call to action:

- ▶ Canada's entrepreneurs rank in bottom five of the G20 in terms of seeing self-made worth as something to celebrate.
- ▶ They see job creation as much more important.
- ▶ The profile of entrepreneurs must be raised to build the confidence of our people.

# Tax and regulation

Canada ranking: 2

## Key Insights

- Canadian entrepreneurs benefit from low tax rates and the country's small deficit ensure corporate and indirect tax rates remain very competitive.
- 44% of Canada's entrepreneurs say the availability of tax incentives has greatly or somewhat improved over the past three years (compared to only 25% across the G20 overall).

## A call to action

- ▶ In 2012, the Federal Government introduced significant changes to its program of scientific research and experimental development (SR&ED) tax credits.
- ▶ As of 2014, all capital expenditures will be excluded from eligibility for investment tax credits.
- ▶ There will be a reduction in the general SR&ED investment tax credit rate from 20% to 15% on 1 January 2014.

# Education and training

Canada ranking: 9

## Key insights

- Canada scores highly on metrics such as public spending on education, as well as on the teaching of entrepreneurial skills in schools and universities.
- 44% of entrepreneurs have seen improvements in access to entrepreneurial education and training.
- 37% cited improvements in delivering dedicated entrepreneurship chairs in universities and business schools..

## A call to action

- ▶ Too few education and training-related efforts focus specifically on the needs of entrepreneurs.
- ▶ Entrepreneurship and a focus on innovation should start in primary grades so that it's woven into society.

# Coordinated support

Canada ranking: 16

## Key insights

- One explanation for this pessimism may be the higher expectations of entrepreneurs in Canada.
- It may be that having been offered an encouraging environment in other respects, entrepreneurs in these nations look for greater levels of support and assistance across the board.

## Call to action:

- ▶ **Government action:** Embed entrepreneurial learning into the school curriculum; support young people; create public programs to support entrepreneurs..
- ▶ **Entrepreneur:** Learn from other entrepreneurs and tap into the experience of others. Be a mentor!
- ▶ **A corporate perspective:** Expand internship programs to provide more hands-on experience and act as mentors.

# Entrepreneurs have a vital role to play in any healthy and vibrant economy

- Governments look to entrepreneurs to kick-start their economies, but entrepreneurs need to be given the tools and environment that will enable them to succeed.
- The Government has sought to offer additional help through a number of policy initiatives and business-friendly tax and regulatory systems.
- Still, entrepreneurs complain that the support does not always get through and access to funding remains a potential barrier to growth.
- Canada remains a world class entrepreneurial environment, but stronger mentoring and increased efforts to bolster research and development (R&D) activity would help.