Conference Proceedings

Volume 1: Keynotes and Panel Sessions

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15th International Entrepreneurship Forum (IEF) CONFERENCE

Conference Theme

The Globalisation and Internationalisation of SMEs and New Ventures:
Travels with Eclectic Charlie, Digital Mary, Networked Nadia and Impactful Shona

Venice, Italy
14-16 December, 2016

INSME

Journal of Entrepreneurship and Innovation in Emerging Economies

Industry & Higher Education

The International Journal of Entrepreneurship and Innovation

Introduction

We present two volumes of the proceedings of our 15th International Entrepreneurship Forum (IEF) Conference on 'The Globalisation and Internationalisation of SMEs and New Ventures'. We met in Venice on 14 to 16 December 2016, and had a memorable intellectual and reflective time with Eclectic Charlie, Digital Mary, Networked Nadia, and Impactful Shona!

We had more than 100 committed delegates deliberating, debating and discussing numerous aspects of international entrepreneurship and the global agenda for SMEs in today's digital world. Thirty two countries and the knowledge and experience of their academic researchers, policy makers, consulting professionals, non-governmental institutions and industry practitioners came together in mid-December in the glorious surrounds of San Servolo island in Venice. Together we shone a light through the fog of obfuscation of knowledge as much as we wrapped up warm in the cold of a very foggy, very Venetian winter. We had planned study visits, keynotes reflecting the topical issues of our time, panel sessions sharing ideas, knowledge of good practice and policy on key sub-themes, and research papers from across the world covering a wide range of issues on internationalization and globalization of SMEs.

Our study visits took us to the famous Shoe Cluster of Riviera del Brenta, the Shoe Museum and Villa Foscarini, where we learnt much about the creative design thinking that underpins Italian innovation. This was then followed by a visit to the San Daniele Ham Cluster in San Daniele del Friuli near Udine where areal insights into the production, marketing, selling and constant improvement of prosciutto ham generated much food for thought not to forget the delicious lunch spread laid on by our hosts.

The Shoe Cluster visit laid the foundation for our opening event at the Venice Chamber of Commerce Industry, Craft and Agriculture of Venice Rovigo Delta Lagunare, in San Marco. The explanation of the role and function of the IEF was followed fittingly by a comprehensive elaboration of the work of the Organisation for Economic Co-operation and Development (OECD) for SME internationalization by Lamia Kamal-Chaoui, the Director of the Centre for Entrepreneurship SMEs and Local Development, at the OECD. Details of her talk can be found later in these volumes. A truly international panel of distinguished policy makers and business practitioners from Italy, Mexico, Abu Dhabi, France and Slovenia was marshalled by Sergio Arzeni, the President of the International Network of Small and Medium Sized Enterprises (INSME). Excerpts from this first day are presented in Volume 1. The conference photographs demonstrate much better than words can do the ebullience and warmth of the networking among delegates that marked our first conference dinner at the famous Harry's Bar in Venice -an unforgettable evening by all accounts!

Sandwiched in between the two visits and on 15 December, we all took on the serious responsibility of research and practice led discourse and reflection. Setting the tone for the day were the keynotes from Zoltan Acs on entrepreneurial match making in the digital age, policy development on SME internationalization at the OECD by Jonathan Potter, and the resiliently innovative Italian clusters by Massimo Deandreis of SRM - Studi e Ricerche per il Mezzogiorno, and Mario Volpe of Ca Foscari University, Venice, Italy. A range of panel sessions covering female entrepreneurship, the role of technology, public policy, transnational entrepreneurship and impact investment tackled critical and highly topical issues offering nuanced perspectives on entrepreneurship and SME internationalization. The plenaries and the panel sessions open up the treasure house of research by a carefully selected group of academics and reflective practitioners who elaborated upon the critical elements of new ventures and SMEs in 40 odd papers. The richness of their endeavor was captured in the various parallel paper sessions and now in Volume 2 of the proceedings. To all our speakers, panel chairs and panelists, paper presenters and session chairs - we salute you for your effort and inputs!

The plenary keynotes, the panel sessions and the research papers became part of a funnel of discourse on the theme of the conference and beyond. They helped to give life to Eclectic Charlie and Dunning's model of internationalisation together with the stories of Digital Mary, Networked Nadia and Impactful Shona, Charlie's 21st century counterparts stretching Dunning's paradigm to embrace new ways, new channels and novel forms of engagement on the global stage of innovation and business as usual (or unusual). We understood through the diversity of research from various countries and regions that while

globalisation seeks level playing instrumentation on uneven ground, internationalisation continues to represent opportunities for growth, productivity and innovation. Correlations are difficult to find and an exposure to globalisation does not necessarily prepare firms for internationalisation. There is a gulf of difference between the standardisation of markets across the globe and internationalisation of production.

This conference provided a platform for the generation of new ideas, insights and practices related to the idea of an agenda for the globalisation and internationalisation of SMEs. They also demonstrated what the Global Innovation Index (2015) pointed to, namely that innovation-driven growth is no longer the prerogative of high-income countries; there are tangible examples of effective innovation policies being introduced by developing countries with corresponding positive outcomes.

IEF's partners are the Venture Academy, Essex Business School, University of Essex, the conference is being co-organised with The International Networks for SMEs (INSME), the OECD Centre for Entrepreneurship and the Local Employment and Economic Development at Paris, France, and the Forum for Sustainable New Ventures in the UK. It is in such partnerships among willing producers and users of good ideas and robust practice that we find the means with which to run successful events. To all our partners many thanks indeed for making this IEF conference worthwhile. All our other sponsors and partners – Qatar Development Bank, Venice International University (Ambassador Vattani for his support). We are appreciative of the time and space afforded by the Venice Chamber of Commerce, the collaboration and complete involvement of T2i Innovation Agency, the Industry and Higher Education Journal for their continuing engagement with the IEF conferences and of course the IEF's journal (JEIEE published by Sage) for being the main receptacle for the prospective publication of selected papers from the conference.

Turning finally to all the incredible people, we turn first to offer special thanks to Sergio Arzeni, for masterminding the partnership with INSME, and Italian collaborators, our speakers from Mexico, Abu Dhabi, and crucially our continuing relationship with the OECD and its Centre for Entrepreneurship, not to forget the inspirational touch in arranging our social gathering at Harry's Bar on 14 December and Osteria da Codroma restaurant on 15 December. The INSME Secretariat team of Maddalena Iesué and Livia Marcantonio deserve our applause for their help throughout the development of conference programme, as does Silvia Casalini and her team for their wonderful administrative assistance before, during and after the event. We will now not forget the best boat tickets to buy amongst many other things. Anilkumar D. Dave and Roberto Santolamazza of T2i gave us invaluable support with the final arrangements at the Chamber of Commerce apart from making highly topic interventions during the deliberations. Our photographer, Davide Giacometti has done a fine job with his photos and the conference video as I hope you will all agree. Busayo Ajayi representing the Forum for Sustainable Ventures was instrumental in managing the financial aspects of the conference, so many thanks go out to him for the partnership that he provided through his Forum. I cannot imagine anyone attending the conference, or for that matter having any interaction with the IEF for our event (even if you didn't make it to Venice!) not to have come across Elena Koshcheeva the person who was always in touch with you, the conference administrator who attended to almost every aspect of the conference, from attending to the delegates, the preparation of the banners, the conference packs, the conference programme, the management of the reception desk, the booking of rooms, hotels, and all things that made up two days of our lives in Venice. Quite remarkable!

Finally, thank you to all the delegates for it is you who make our conferences work. We hope that all of you enjoyed being involved and engaged pro-actively to create a diverse and productive agenda for entrepreneurship at a time when the world genuinely seeks new ideas and trajectories of development at home and abroad. By the time you receive these copies electronically, many unpredictable happenings would have started to alter the reality of our lives in and with SMEs across a so-called 'post truth' world. Let us hope that the ideas, the evidence, and all the expertise that were on display at the 15th IEF have a bearing on the truth of 2017 and beyond.

Jay Mitra

January, 2017

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Keynote Presentations

University of Essex

Welcome and an introduction to The International Entrepreneurship Forum

Jay Mitra
Professor of Business Enterprise and Innovation
Essex Business School
University of Essex

15th International Entrepreneurship Forum Conference
Venice, Italy
14 December, 2016

The International Entrepreneurship Forum

- A loose network aimed at dissemination of ideas, evidence and practice
- Connecting thinkers, researchers, policy makers and practitioners
- Enabling networks of people, organisations and global regions
- Through one annual conference and supporting events worldwide
- For the past fifteen years

The Evolution of the IEF Conferences

1 

Naples, Italy, 2001 *Entrepreneurship & Learning'*

2 

Beijing, China, 2002, *Entrepreneurship & Regional Development'*

3 

Bangalore, India, 2003: *Entrepreneurial Innovation'*

4 

Paris, 2004 *:Entrepreneurship: Contexts, Locales and Values*

5a 

Trento, 2005 *Entrepreneurship: The Role of Higher Education*

5b 

Cape Town South Africa, 2005 *Entrepreneurship and New Ventures Across Borders*

6 

Riga, Latvia, 2006 *Creativity and Entrepreneurship*

7 

Shanghai, China, 2007*: Asian Entrepreneurship*

8 

Ahmedabad , India, 2008:*Creativity and Entrepreneurship*

9 

Istanbul, Turkey, 2009 *Entrepreneurship and the Creative Use of New Technologies*

10 

Bahrain, 2010/11: *Entrepreneurship and Society: Creating Social, Cultural, Economic & Personal Value*

11 

Kuala Lumpur, Malaysia. 2012 *Entrepreneurship and Sustainability*

12 

Vilnius, Lithuania , 2013: *Social Sustainability and Economic Security: The Agenda for Entrepreneurship in the 21st Century*

13 

Bogota, Colombia, 2014 ***Entrepreneurship and Development: The Idea of Inclusive Opportunity Creation***

14 

Cape Town, South Africa, 2015: *Entrepreneurial Institutions and the Entrepreneurial Society: Creating an Inclusive Agenda for Opportunity Creation*

University of Essex

Our Themes So Far

Learning

Sustainability

Regional Development

Entrepreneurial

Entrepreneurial Innovation

New

Technologies

Locales Contexts

Value Creation

Inclusivity

New Ventures Across Borders

Asian

Higher Education

Creativity

Entrepreneurship

Image sources: Linked in/ Eurisavr/Institute of Policy Studies/Petra & Fos/The Asian Entrepreneur/Haas Newsroom University of California Berkley/ UMassAmherst/University of Kelaniya

To 2016:

Understanding

Internationalisation as a process and Globalisation as a phenomenon

The Venture Academy
Essex Business School, University of Essex, UK,
Venice Chamber of Commerce, Italy
and
International Network of Small and Medium Sized Enterprises (INSME)

To

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"But my friends call me Lefty."

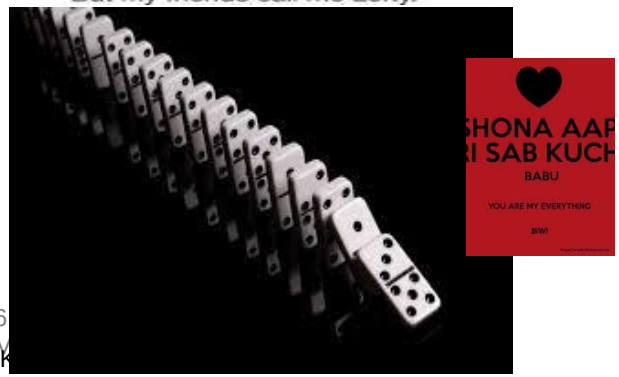
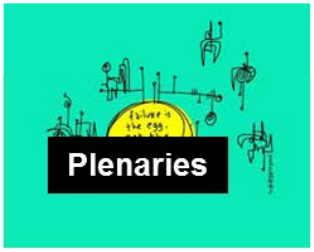
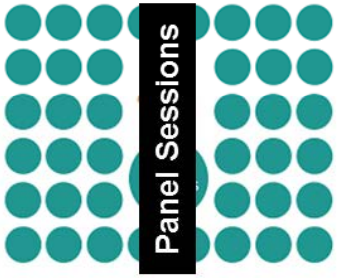


Image Sources: Pinterest/McKinsey/Cartoon Stock/ Al Davies/Newyorker/Wales Millennium Centre/Nadia Forde/K

Your IEF Conference 2016

- Articulation, Discussion, exploration, interactions and possible resolutions
- Networking with thoughts, research, concepts, evidence, and novelty
- Overcoming scarcity of ideas, mobility, resources and bandwidth
- Crossing boundaries of space and identity
- Creating a better sense of collective entrepreneurship





Many thanks

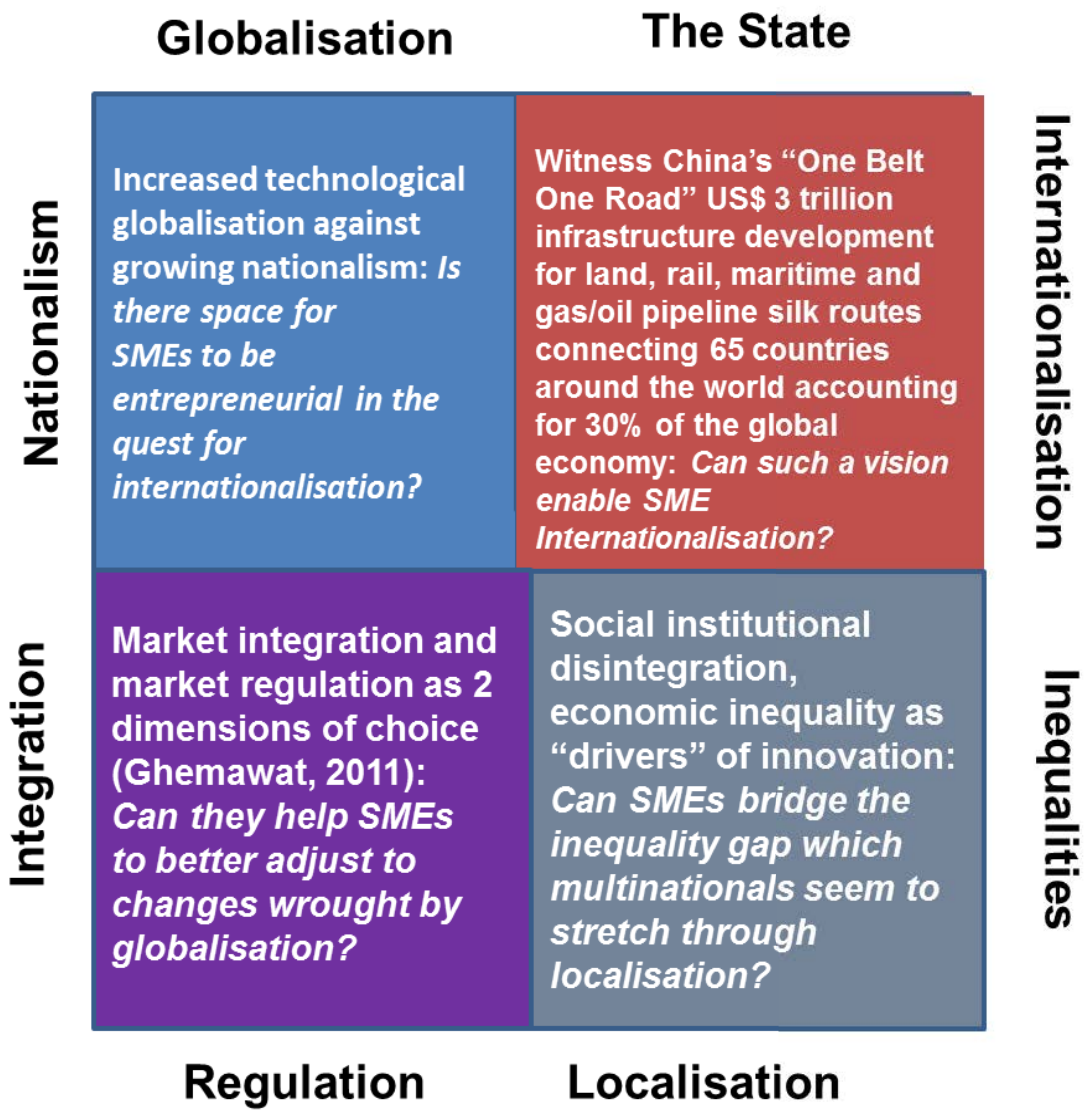
- The OECD for its continuing partnership and support
- INSME for its partnership in 2016
- All our other sponsors and partners – QDB, VIU, Forum for Sustainable Ventures, Venice Chamber of Commerce, T2i, Industry and Higher Education Journal, Journal For Entrepreneurship and Innovation in Emerging Economies
- *And our incredible people*:

  To Sergio, a very special thank you
  To the INSME Secretariat
  To Dr Busayo Ajayi at the Forum for Sustainable Ventures
  and
  Very specially to Elena Koshcheeva the person who was always in touch with you and who made everything work for the conference.

- My thanks to my University (Essex, UK).
- And to all of you for being here with us.

Some overarching considerations for your deliberations……

Asymmetrical Big Issues



Enjoy the 15th IEF!

Introductory Statements

Lamia Kamal-Chaoui
Director, Centre for Entrepreneurship, SMEs, Local Development, and Tourism
International Entrepreneurship Forum – The Globalisation and Internationalisation of SMEs and New Ventures

Venice, Italy
14 December 2016

Ladies and Gentlemen,

I am very pleased to join you at the 15th annual conference of the **International Entrepreneurship Forum.** The OECD has a longstanding collaboration with the IEF, and I am happy to be carrying this work forward as the **new Director of the OECD Centre for Entrepreneurship, SMEs, Local Development and Tourism**. I have been passed this baton by **the past Director, my friend Mr. Sergio Arzeni**, who is now president of INSME, our partner in this event.

We are coming together at a challenging time. The global economy is stuck in a **"low growth trap"**, with growth stagnant at around 3%.[i] For this, we cannot lay all of the blame at the feet of the crisis! Some 90% of OECD countries were already experiencing a **decline in productivity growth** after the turn of the millennium.

But behind this big picture, the trends have not been uniform. **Leading firms - the so-called 'global frontier' firms - have continued to register strong productivity gains.** These firms have marched ahead leaving the poorer performing counterparts struggling in their wake. Why is this the case? First, the capacity of other firms – including SMEs -- to learn from the frontier may have diminished. This is what we call the breakdown of the **'diffusion machine'.** Second, the nature of technological change may be contributing to **"winner take all dynamics",** with first-mover advantage giving certain firms a persistent competitive edge with little spill-over of the technological advances to the other firms that come later. Thirdly, the persistent **lingering of low performing firms** traps valuable resources, including workers, in unproductive activities.

We are also seeing a **slowdown in globalisation** – as evidenced by subdued trade growth and FDI flows. At the same time, the **backlash against globalisation is picking up speed**. Despite evidence of the net benefits of globalisation, many people feel that it has created a relatively short list of winners and a relatively long list of losers. **With inequalities in income, wealth and well-being on the rise over the past three decades, it's not surprising that people are feeling left out and left behind.**

Relatively few SMEs have been able to **reap the benefits of a globalised economy to date.** If we truly want globalisation to work for all – and to close the productivity gap between leading and lagging firms – we must empower **all** SMEs to make globalisation and internationalisation work better for them! This is why the issues we have come together to address are so critical. Given the **important role that SMEs plays in the Italian economy in the Venice region in particular,** I can't imagine a better backdrop for these discussions.

SMEs are underrepresented in exporting

Across the OECD area, SMEs account for **60% of business sector employment and around 45% of business sector value added.** This is even higher in many countries such as Korea, Greece, and Italy, where they account for more than 80% of business sector employment.[ii]

However, the share of SMEs in exports is **very low in comparison**. The OECD's new project to benchmark SME performance, business environments and policies[iii] shows that **SMEs account for only about 10% to 15% of total exports across OECD countries**. In addition, SMEs typically export disproportionately to neighbouring countries in comparison to large firms. On the other hand, in some countries SMEs are substantial exporters to emerging economies such as China and India. For example SMEs account for 60% of the value of exports to these countries from the Netherlands and 50% from Spain.

In today's economy, we must think of internationalisation as more than just exporting

It is tempting to think of internationalisation only in terms of capacity to export. However, in today's global economy, **we must also consider the other aspects of internationalisation that are equally important.**

- **First of all, the internationalisation of R&D.** Collaborating with foreign firms around R&D and innovation has never been easier thanks to lower trade barriers and digital technologies. These changes have also lowered barriers to investing and subcontracting parts of work abroad.

- **Second, accessing global value chains.** Even companies that remain focused on the domestic market are increasingly able to reap the benefits of globalisation. They are able to import lower-cost or more advanced inputs. They can also pick up global best practice technologies and indirect export opportunities through supplying foreign direct investors in their own countries.

While SME direct exports are rather limited, **the picture is quite different when you look at contributions to global value chains through indirect exports.** We took this message to the G20 in 2015 with our report "Inclusive Global Value Chains".[iv] Our cutting edge analysis of global value chains combines data on SME activities with our new Trade in Value Added database. We found that in the United States, for example, SMEs accounted for only 28% of direct exports in 2007, but this number rose to 41% when looking at indirect exports.

Policy makers can do more to improve the business environment for SME internationalisation

The OECD's work also shows that conditions for SME access to international markets **have generally improved in recent years**, largely thanks to improvements in physical and ICT infrastructure. However, there are some **large differences across countries**.

Fibre connections, which are becoming an indispensable part of the infrastructure underpinning international business activity, are a case in point. In 2014, fixed broadband subscriptions **ranged from over 40% of the population in Denmark, Netherlands, and Switzerland to less than 15 in Chile, Mexico, and Turkey.**[v]

Additionally, although explicit barriers to trade and investment have been reduced significantly in the OECD area in recent decades, **other, less explicit barriers remain**. These include **measures discriminating against foreign suppliers still in place in a large number of countries**. With the exception of a few countries, **barriers to entry and foreign investment are particularly high in services sector**, specifically in professional services where there are many SMEs.

Low productivity and limited use of technology also hold back SME exporting

To support SME internationalisation, policy makers must address a number of fundamental factors holding back SME direct and indirect exporting activity. One such factor is **low productivity**. Our recent report "**Upgrading productivity in small traditional enterprises**", shows a positive correlation between growth in SME labour productivity and growth in SME exports in the six years following the crisis.[vi]

However, as I alluded to earlier, **SMEs continue to lag behind larger firms in terms of productivity**. The productivity of firms with less than 10 employees is only around 50% that of firms with 50 employees and more. There is a further gap between these firms and even larger firms, with at least 250 employees. **Worryingly, this productivity gap has been growing since the 2008 crisis.** In addition to a lack of finance and investment in SMEs and lack of sheer

scale economies**,** our work shows that **weak managerial skills are a contributing factor to these productivity gaps.**

Efforts to **improve how SMEs use digital tools will also be critical :**

- In the OECD area**, 75% of large companies use enterprise resource planning software compared to only 25% of companies employing 10-49 people**. And yet, the use of this technology is often required to integrate the supply chains of global firms.
- Only **21% of these companies use cloud computing compared to almost 40% of large companies**.
- In most OECD countries, **90% or more of large enterprises have a web presence, compared to only 69% of SMEs.** In **2013, 40% of large enterprises participated in e-commerce, but less than 20% of SMEs did.** [vii]

But does this mean small is bad and big is beautiful? No -- the story is not all negative!

Digitalisation is allowing even the smallest of businesses to internationalise at an increasing rate. SMEs are now able to be **"born global",** leveraging technology to operate as stand-alone "micro-multinationals" from their start. While this creates opportunities for SME growth that is more equally shared across the globe, firms that do not engage fully in the digitalisation era may be left behind.

Governments are also developing a range of new policy actions, particularly in digitalisation

Governments are using a range of new tools to help SMEs overcome these challenges and expand exporting. The **OECD's reviews of SME and entrepreneurship policies** in countries such as Israel, Mexico, Italy and Russia shows that governments are moving beyond the policy tools of providing information, training and trade finance. There is growing recognition that new tools are needed, including **consultancy, mentoring and assistance to unleash innovation, including organisational and market innovation.**

Governments are also starting to respond to these opportunities and risks related to digitisation. For example, the Business Development Bank of Canada is **supporting new digital entrepreneurs through the Canada Accelerator and Incubator Programme** and through the **Digital Canada 150 initiative, is offering consulting and financial support to help existing SMEs adopt digital technologies**.

Finally, SMEs and new ventures located in local clusters are often among the most successful in internationalisation. Local clusters can provide high productivity environments based on concentrations of local skills, numerous local innovation projects, and strong social capital links that help knowledge to flow on key technologies and market opportunities. Italy is famous for some of these clusters, in sectors such as footwear, furniture, and textiles. One of the critical challenges today is to support these clusters to retain their competitiveness in the face of international competition by promoting their innovation and diversification into growing niche activities.

The OECD stands ready to continue to support governments to design appropriate actions

Ladies and gentlemen,

We at the OECD are committed to working with all of you to better understand and respond to the challenges SMEs face to internationalisation. We will continue to **build the quantitative evidence base**, to **benchmark the business environment, financing and policy framework across countries**, and to provide **targeted advice through our series of country and local reviews.** This conference gives us an opportunity to share this work with you, and I hope it provides **concrete ideas for how we can take our collective work to the next level in the future**.

Thank you.

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[i] OECD (2016), *Global Economic Outlook, November 2016*
[ii] OECD (2016) *Entrepreneurship at a Glance 2016*
[iii] CFE/SME(2016)2/REV1/PART1
[iv] Inclusive global value chains: joint OECD and World Bank Group report
[v] CFE/SME(2016)2/REV1/PART1
[vi] Upgrading productivity in small traditional enterprises: the role of management skills and practices. Background paper for the INADEM-SELA-OECD International Conference on "Developing public policies for upgrading productivity in small traditional enterprises" Puerto Vallarta (Jalisco), Mexico, 3-4 November 2016
[vii] OECD (2015) OECD Digital Economy Outlook 2015, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/9789264232440-en

15th International Entrepreneurship Forum (IEF) Conference

Technology, Open Data, Ecosystems and SMEs.

THE VALUE OF INNOVATION FOR SMEs

Massimo DEANDREIS

General Manager, SRM - Studi e Ricerche per il Mezzogiorno, Italy

Venice, 15th December 2016

AGENDA

- **The innovative ecosystem of Italian SMEs in Europe: gaps to fill and feasible paths**

- **The position of Southern Italy and relaunch possibilities: the key role of some leading sectors**

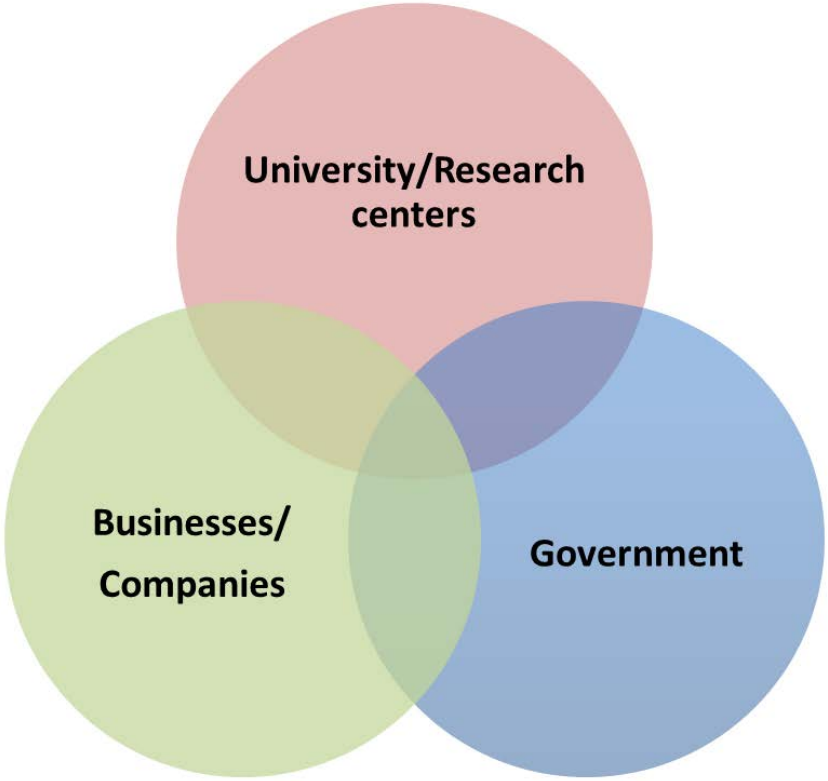
- **Final comments**

The innovative ecosystem is based on the *Triple Helix model*

- Empirical evidence has shown that to create an SMEs ecosystem able to favor the rise of a competitive environment we need interactions between the three key players in the innovation process:

s

Triple helix model



Which sector is most involved in the innovation process ?

- Disruptive technologies will affect our life, many business and the global economy
- One sector where technologies will have a more significant impact is **the manufacturing.** In Europe this generates **a turnover of more than 7,000 billion Euro**, and represents **65% of productivity, 74.6% of export and 65% of private investment in R&D.**
- **The new technologies can revamp the European economy, making it more competitive on a global scale.** There are many positive impacts expected on European manufacturing:
  - **increased efficiency and productivity**.
  - **faster processes** thanks to supply-chain based on data analytics, with a 120% decrease of delivery times of orders and time-to-market reduced by 70%
  - **management and participation to global value chains**, interconnected and digitalized, characterised by a marked integration of supply chains
  - **increased engagement of the customer**, with higher degrees of customization and quality of the product
- For Italian SMEs the impact of the innovation process is expected to be more substantial because Italy is the second manufacturing country in Europe and our companies have a significant gap of productivity to fill.

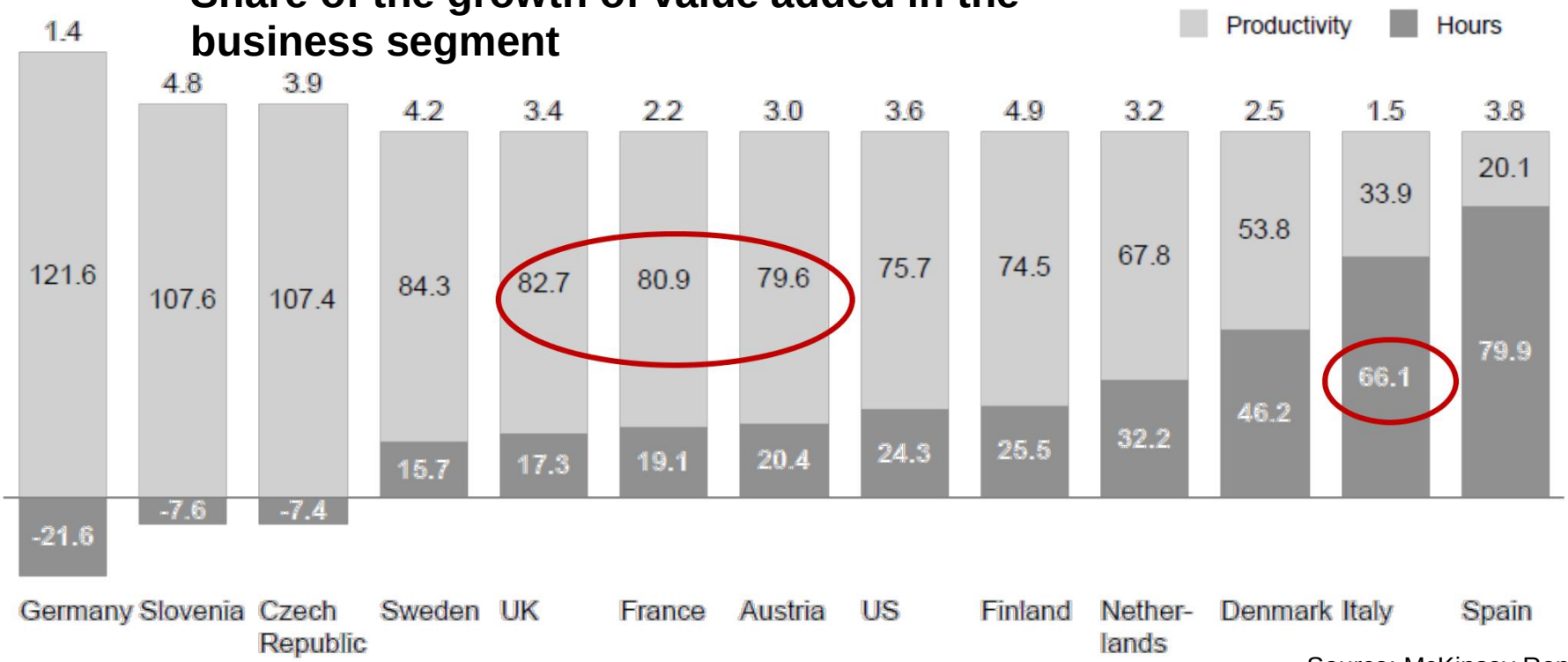
Source: The European House Ambrosetti on OECD, Eurostat and European Commission 2016

Italian SMEs show a lower productivity rate

- In Italy, the growth of value added in business segment in the last twenty years is due by 2/3 to the quantity of working hours and just by 1/3 to increased productivity.

- In France, UK, Austria, the correlation is reversed: about 80% of growth of value added is due to productivity increase.

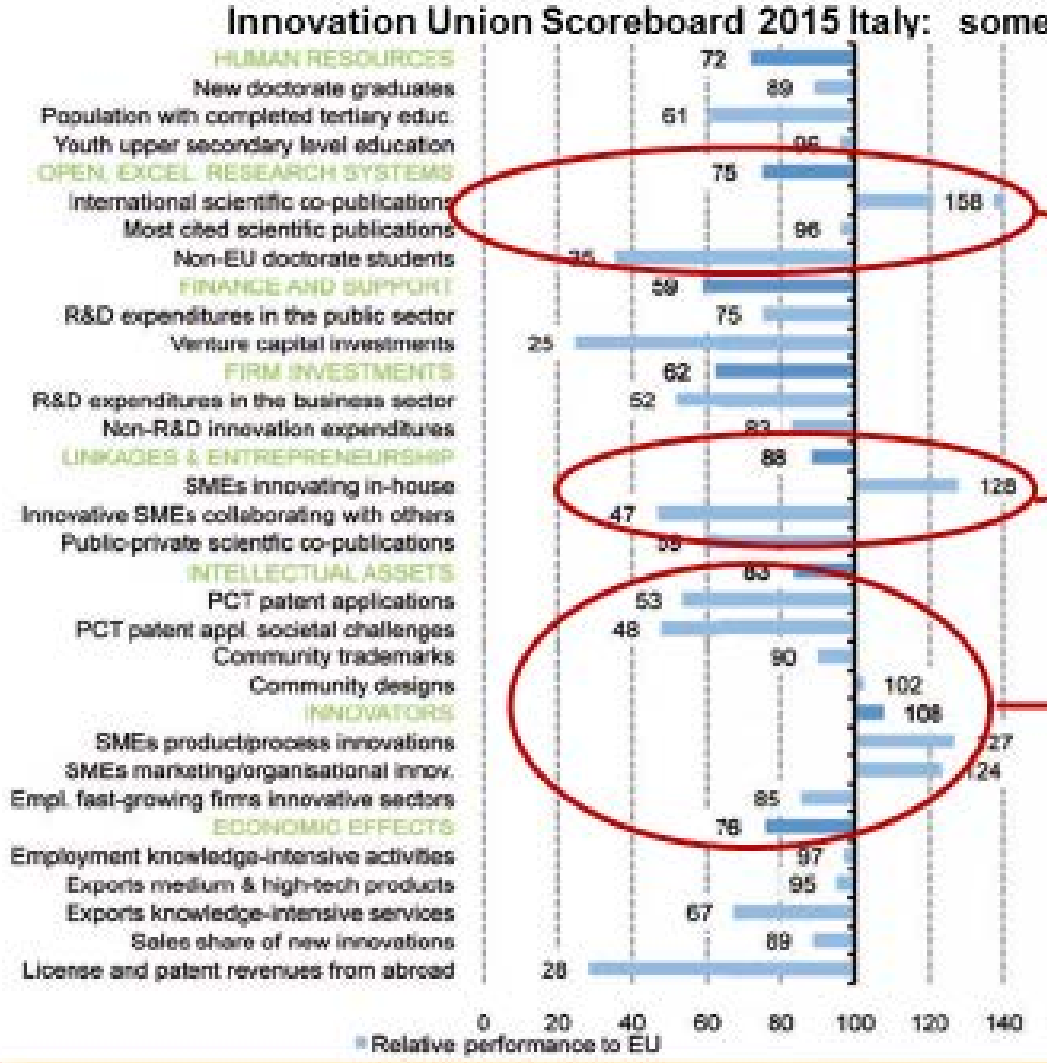
Share of the growth of value added in the business segment



Source: McKinsey Report

Lower productivity is largely due to scarce ability of SMEs to act in / contribute to the ecosystem

- The UE comparison highlights the **innovation skills of individuals but the poor capability of acting as a system**

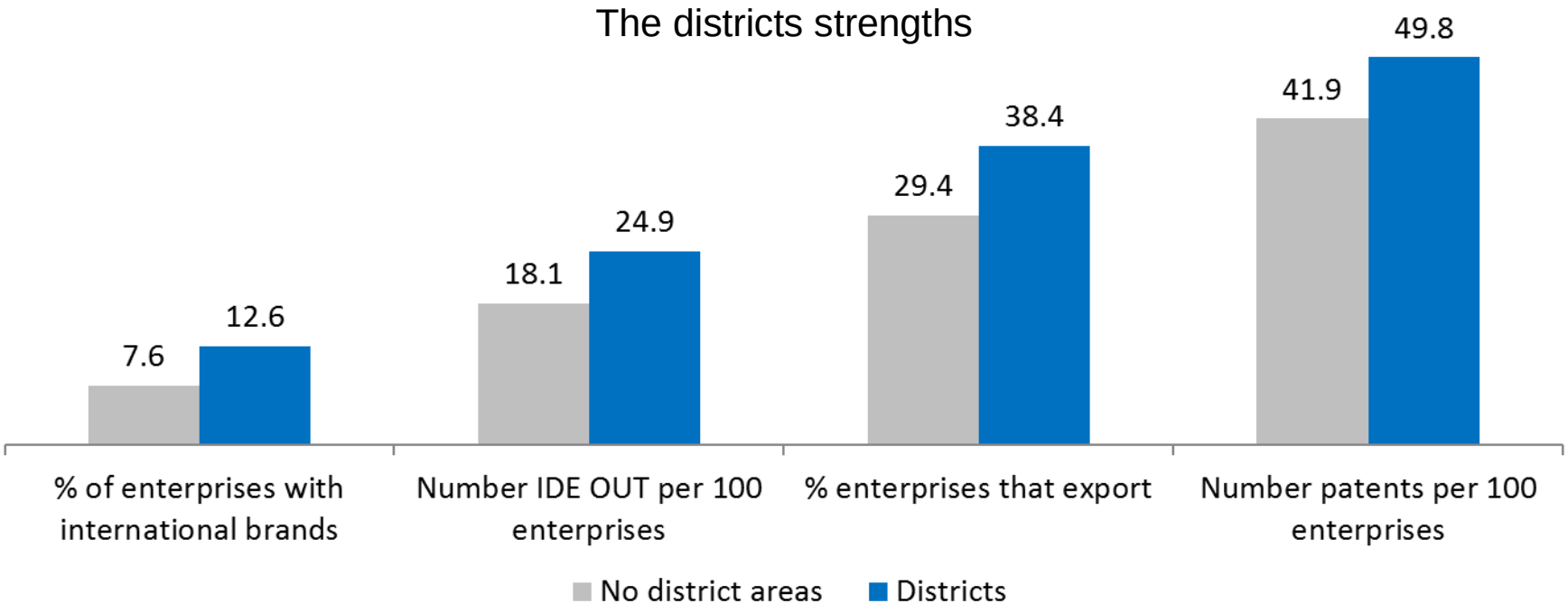


- Strong in basic research but **poor in attracting foreign researchers**
- Good predisposition of SMEs toward innovation **but incapability of «networking» with others**.
- High product/process innovation capability of SMEs **but structural weakness in patenting ideas and in creating international brands**.

Source: The Innovation Union Scoreboard 2015. European Commission

Beyond averages, SMEs are not all the same: the important role of the districts for Italian companies

- Empirical evidence has shown that SMEs operating in districts perform better than companies operating in the same sector **but out of districts.**



Source: Economia e Finanza dei distretti industriali. Intesa Sanpaolo

- **On 147 traditional Italian districts, 27 are in South Italy**

AGENDA

- **The innovative ecosystem of Italian SME in Europe: gaps to fill and feasible paths**

- **The position of Southern Italy and relaunch possibilities: the key role of some leading sectors**

- **Final comments**

Southern Italy has significant gaps compared to the rest of the national territory

- Compared to Italy, Southern Regions have an innovation gap both in terms of R&D expenditure and in terms of employees and support infrastructures.

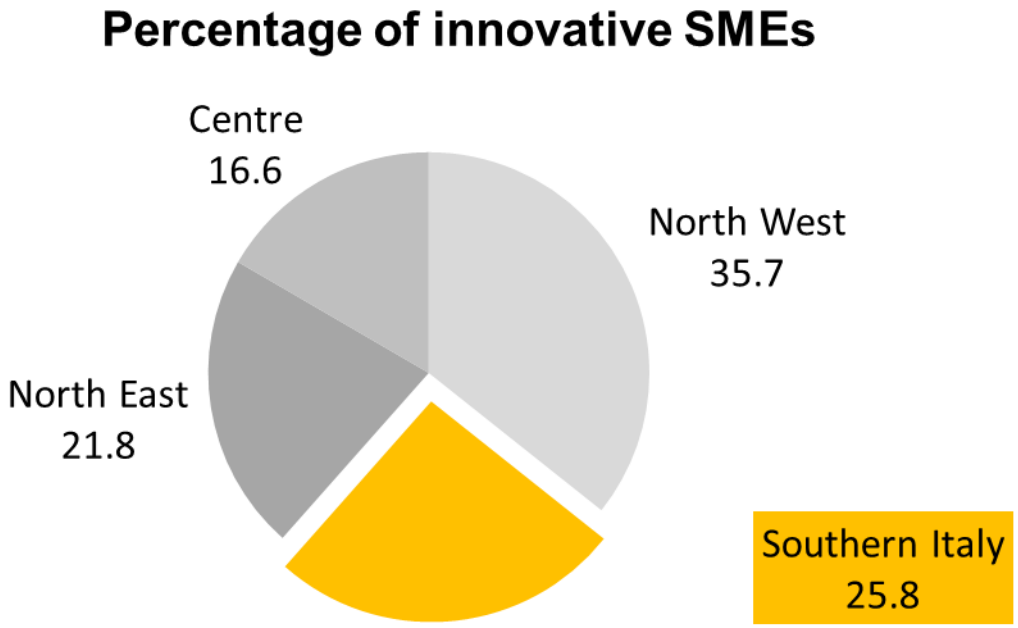
	Italy	Southern Italy
R&D expenditure of companies on GDP (2013) %	0.7	0.3
Total R&D expenditure on GDP (2014) %	1.38	1.06
Graduates on population (2014) %	13.9	11.5
People employed in R&D on population (2014) %	15.5	10.6
Companies that carried out R&D through external infrastructures (2013) %	20.56	30.54
Diffusion index of broadband in companies (2015)	94.4	92.2
Innovation rate of the productive system	33.5	25.5

Source: SRM on several sources. Istat

However, there are positive signals from the «Mezzogiorno»

- **Southern Italy has a better position in terms of:**
  - ✓ Birth rate of companies in high knowledge-intensive sectors: *Southern Italy 9.6 and Italy 8.2*
  - ✓ Growth of patent applications published by EP in the last two-year period:

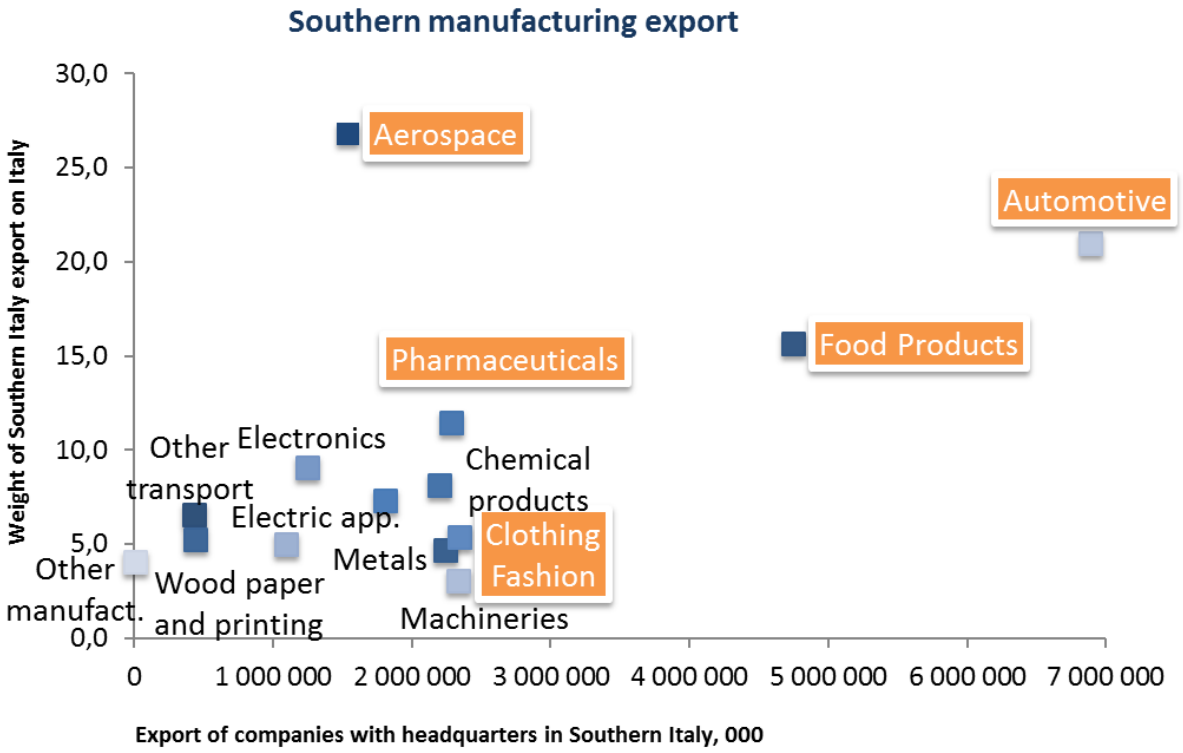
    Southern Italy +7% and Italy -1.8%
- **Innovative SMEs**: 325 in Italy, 26% in Southern Italy (84 innovative SMEs).



Source: Registroimprese.it. Updated to 5 December 2016

Southern Regions of Italy have several attractive sectors too

- **A substantial part of the export** of our Country comes from the Southern productive chains **of Aerospace, Automotive, Agri-Foods, Clothing-fashion and Bio-pharmaceutical.**
- **The weight of the export of these chains on the total export of Italy is 13%.**



% Weight sectors on non-oil Manufacture

	South	Italy
Food products	15.5	7.3
Clothing-Fashion	7.3	12.5
Pharmaceuticals	7.5	5.2
Automotive	22.5	8.6
Aerospace	5.0	1.5
Total	57.8	35.7

Source: Istat

Sectors that «innovate and produce» and that are above the averages

- **For example, the sectors of** Agri-food, Aeronautical, Automotive, Clothing and **Pharmaceutical Activities** generate **in Southern Italy about 11.4 billion € of value added, equal to over 16% of Italy**.

- In Southern Italy the **weight of these sectors on manufacturing** is about **42%, while in Italy it is 31%** (greater specialization).

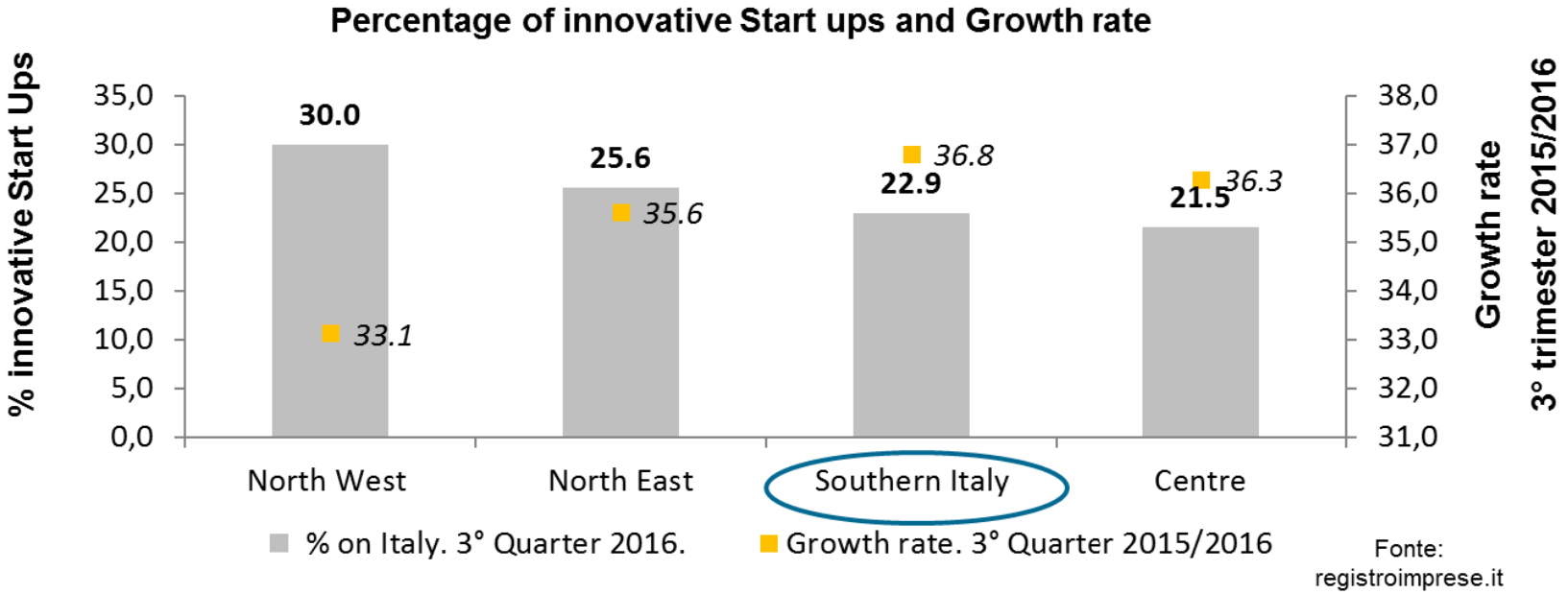
Some data of Southern Italy

Chain	Value Added mn	Export mn	Local units	Employees local units
Aeronautical	930 (30%)	1,535 (26.8%)	108 (35.2%)	13,989 (42.7%)
Automotive	2,281 (24.8%)	6,891 (21%)	500 (17.0%)	37,847 (24.5%)
Foodstuffs	5,045 (20.9%)	4,748 (15.7%)	27,316 (43.8%)	122,702 (29.1%)
Clothing Fashion	2,526 (11.3%)	2,238 (4.7%)	12,439 (19.0%)	67,106 (14.8%)
Pharmaceutical Activity	599 (6.5%)	2,281 (11.5%)	103 (14.8%)	5,203 (9.1%)

Source: SRM elaborations on Istat

In Southern Italy there is a growing demand for «innovative business»

- **Innovative Start Ups**: more than 6,000 companies in Italy, of which 1,457 in Southern Italy (22.9% of the national data) .
- **Positive trend in the 3Q of 2015/2016**: +35.3% in Italy, **+36.8% in Southern Italy**



Fonte: registroimprese.it

Business initiatives are mainly fuelled by under 35

- 34% of under 35 entrepreneurs in Italy operates in young companies (i.e. less than 5 years old): *essentially start ups.* This data rises to **38% in Southern Italy: 220,255 youth enterprises** (40.1% of Italy)

Source: Chamber of Commerce Macerata

AGENDA

- **The innovative ecosystem of Italian SME in Europe: gaps to fill and feasible paths**

- **The position of Southern Italy and relaunch possibilities: the key role of some leading sectors**

- **Final comments**

Final remarks

- The innovative ecosystem of Italian SMEs, especially in the South, has an evident gap with the European context, which is also due to an attitude of SMEs to operate alone instead of acting and contributing to the ecosystem. This causes inefficiency, productivity gaps and … (from banking perspective) negative impact on credit and financial side.

- However, there have been signs of a changing trend:
  - Data can be misleading because successful cases are not highlighted; districts are a key example…
  - Manufacturing sector is the sector where disruptive technologies could impact more; Italy has a significant role in manufacturing and a large number of Italian SMEs are operating in these chains. Here we are seeing positive examples of Triple Helix Ecosystem
  - Southern Italy has significant gaps compared to the rest of the national territory. However, there are positive signals from the «Mezzogiorno»: birth rate of companies and patent rate are growing faster than in the rest of the country

What is needed to accelerate the process

- Pro-active Public Administration, more efficient, and digitalized (especially in the South of Italy where P.A. is slower…)
- Supporting an entrepreneurial attitude from early stages of education to university where new Start-up projects and business can be set up. : Italy (and especially the South) has high levels of business creativity expressed by a significant number of young entrepreneurs and new Start-Ups.
- A more prominent role of Universities. The top Italian universities, especially the technical courses, have already moved into a more business oriented approach, but a deeper and more rooted involvement is required from the whole school system (starting from the secondary)
- A banking system able not only to provide credit but also to support companies and SMEs in this evolution process. We can do more than what we are doing…
- BUT SMEs SHOULD EVOLVE AND APPRECIATE THE IMPORTANCE AND THE POSITIVE IMPACT THAT SOLID ECOSYSTEM COULD HAVE ON PRODUCTIVITY, INNOVATION AND GROWTH.
- **COOPERATION IS THE BEST WAY TO STAY COMPETITIVE**

Innovation in the Digital Age: Matchmakers

Zoltan J. Acs

George Mason University

The GEDI Institute

15th International Entrepreneurship Forum Conference
Venice, Italy
14-16 December 2016

Matchmakers:

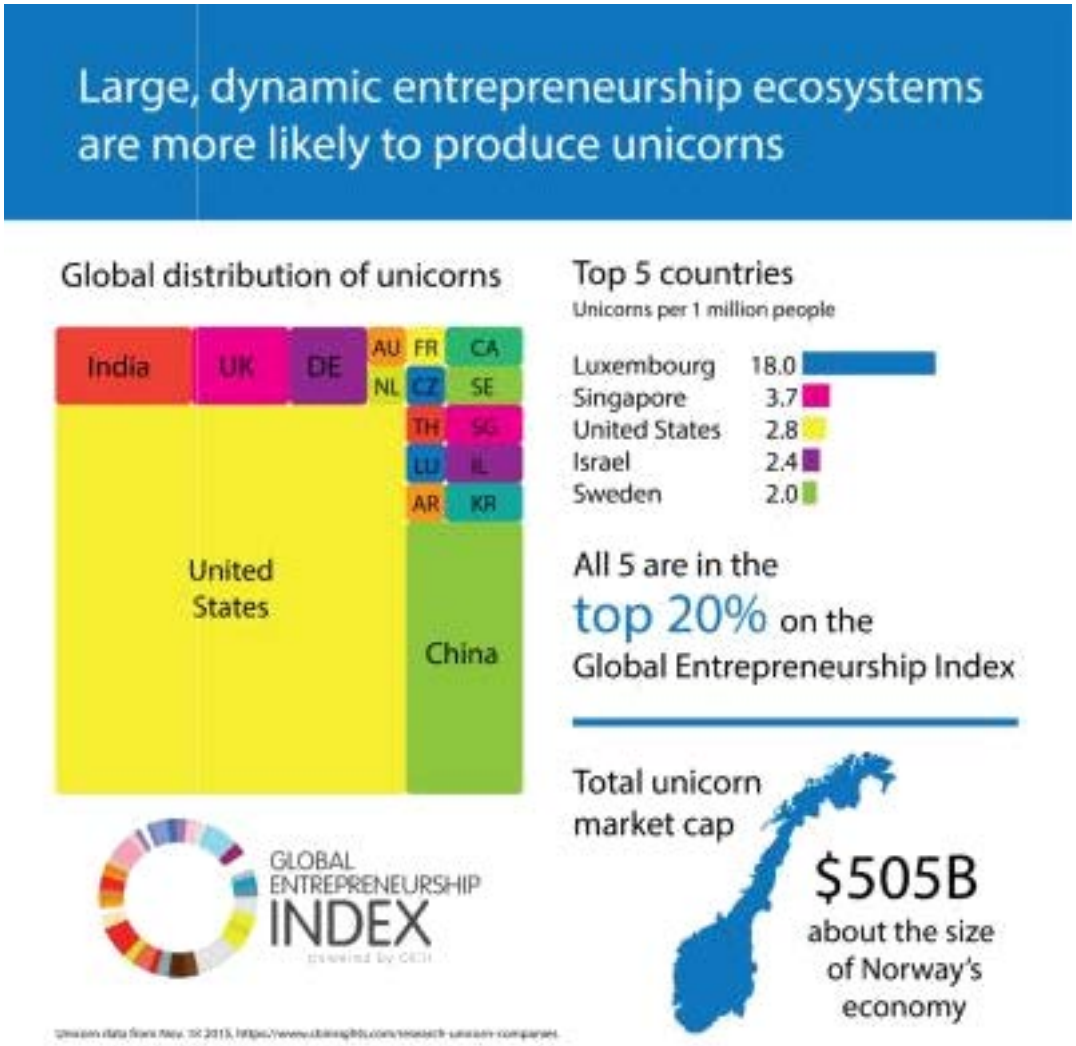
The Entrepreneurs of Multisided Platforms

INTRODUCTION

- A significant gap exists in the conceptualization of entrepreneurship in the digital age.
- This paper introduces a conceptual framework for entrepreneurship in the digital age by integrating two well established concepts: the digital ecosystem and the entrepreneurial ecosystem.
- The Digital Entrepreneurial Ecosystem framework consists of four concepts: **digital infrastructure governance, digital user citizenship, digital entrepreneurship, and digital marketplace.**
- The paper develops propositions for each of the concepts and outlines a new research agenda to fill the gap in our understanding of entrepreneurship in the digital age.

Unicorns are Multisided Platforms or matchmaker businesses.

Trying to understand the leading forces of development in the 21th century without digital technologies would be the same as explaining the 19th century industrial revolution without talking about the steam engines.


Large, dynamic entrepreneurship ecosystems are more likely to produce unicorns
Global distribution of unicorns
India
UK
DE
AU
FR
CA
NL
CZ
SE
TH
SG
LU
IL
AR
KR
United States
China
GLOBAL ENTREPRENEURSHIP INDEX
Top 5 countries
Unicorns per 1 million people
Luxembourg 18.0
Singapore 3.7
United States 2.8
Israel 2.4
Sweden 2.0
All 5 are in the top 20% on the Global Entrepreneurship Index
Total unicorn market cap
$505B
about the size of Norway's economy

Country	Number of unicorns
United States	90
China	21
India	7
United Kingdom	5
Germany	4
Canada	2
Israel	2
Singapore	2
South Korea	2
Sweden	2
Argentina	1
Australia	1
Czech Republic	1
France	1
Luxembourg	1
Netherlands	1
Thailand	1

Industry	Number of unicorns
eCommerce/Marketplace	31
Internet Software & Services	23
Fintech	16
Big Data	14
Healthcare	10
On-Demand	9
Cybersecurity	7
Hardware	7
Social	7
Mobile Software & Services	5
Adtech	3
Media	3
Clothing & Accessories	1
Ed Tech	1
Facilities	1
Film & Video	1
Fin Tech	1
Gaming	1
Greentech	1
Other Transportation	1
VR/AR	1

Company	Valuation ($B	Date Joined	Country	Industry	Investors
Uber	$68	8/23/2013	United States	On-Demand	Lowercase Capital, Benchmark Capital, Google Ventures
Xiaomi	$46	12/21/2011	China	Hardware	Digital Sky Technologies, QiMing Venture Partners, Qualcomm Ventures
Airbnb	$30	7/26/2011	United States	eCommerce/Marketplace	General Catalyst Partners, Andreessen Horowitz, ENIAC Ventures
Palantir Technologies	$20	5/5/2011	United States	Big Data	RRE Ventures, Founders Fund, In-Q-Tel
Snapchat	$168	12/11/2013	United States	Social	Benchmark Capital, General Catalyst Partners, Lightspeed Venture Partners
Didi Kuaidi	$33	12/31/2014	China	On-Demand	Matrix Partners, Tiger Global Management, Softbank Corp.,
Flipkart	$15	8/6/2012	India	eCommerce/Marketplace	Accel Partners, Digital Sky Technologies, Iconiq Capital
SpaceX	$12	12/1/2012	United States	Other Transportation	Founders Fund, Draper Fisher Jurvetson, Rothenberg Ventures
Pinterest	$11	5/19/2012	United States	Social	Andreessen Horowitz, Bessemer Venture Partners, Firstmark Capital
DJI Innovations	$10	5/6/2015	China	Hardware	Accel Partners, Sequoia Capital
Dropbox	$10	10/5/2011	United States	Internet Software & Services	Accel Partners, Greylock Partners, Index Ventures
Lufax	$10	12/26/2014	China	Fintech	Ping An Insurance
WeWork	$10	2/3/2014	United States	Facilities	T. Rowe Price, Benchmark Capital, Wellington Management

Studying Digital Business

- The entrepreneurship literature (Shane and Venkatraman, 2000) has not studied the billion-dollar digital startup because entrepreneurship research is focused on self-employment (Parker, 2002) both as business ownership and as the sole trader.
- The entrepreneurship literature focuses on thousands of small startups and often these small startups fail due to the lack of customer base (Acs et al., 2016).
- In the digital economy it is precisely the opposite—we have much fewer startups and each startup has millions of users.
- In some sense entrepreneurship research has ignored both the role that *digital technologies* play in entrepreneurship and the role that *users* play in digital entrepreneurship.

Studying Digital Entrepreneurship

- … entrepreneurship research has yet to contextualize how the digital entrepreneurial ecosystem will affect innovation, digital business, regional development and globalization.

Why Systems

- National Systems of Innovation, Nelson 1991
- Regional Systems of Innovation, Cooke 1998
- Clusters and Competitive Advantage, Porter 1990
- National Systems of Entrepreneurship, Acs et al 2014.
- Regional Systems of Entrepreneurship, Acs et al 2015

Ecosystem Interdependencies, Cooperation and Competition

The Digital Ecosystem

- Digital infrastructure
- Digital Users
- System

Definition of a Digital Ecosystem

- *"…a self-organizing, scalable and sustainable system composed of heterogeneous digital entities and their interrelations focusing on interactions among entities to increase system utility, gain benefits, and promote information sharing, inner and inter cooperation and system innovation."*
- Korpela, K et al (2016) , IEEE 2016.

Digital Infrastructure

Digital users

The Entrepreneurial Ecosystem

- Institutions
- Agents
- System

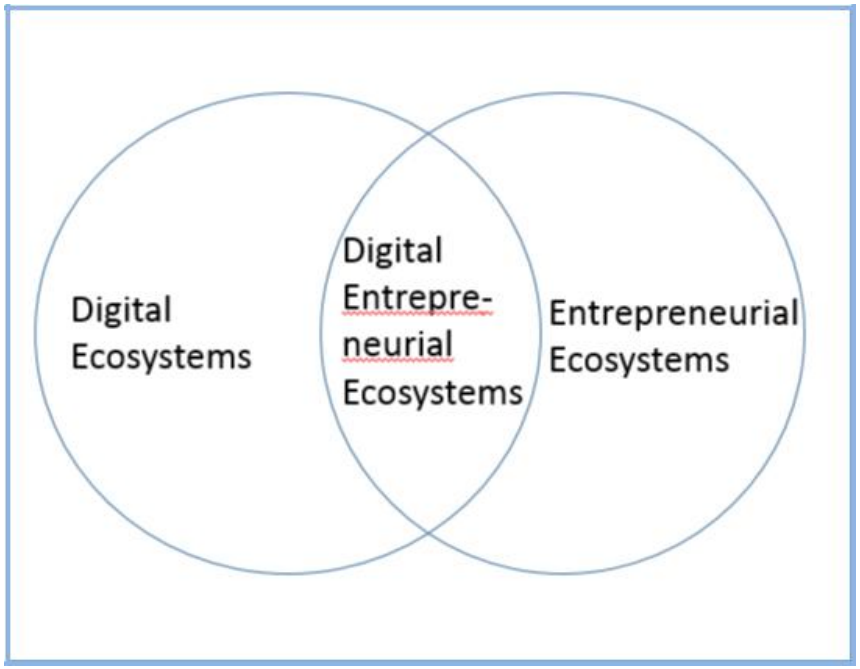
Definition of Entrepreneurial Ecosystem

- *"…dynamic institutionally embedded interaction between entrepreneurial attitudes, abilities and aspirations, by individuals, which drives the allocation of resources through the creation and operation of new ventures."*
- Acs, Szerb, Autio (2014) *Research Policy*

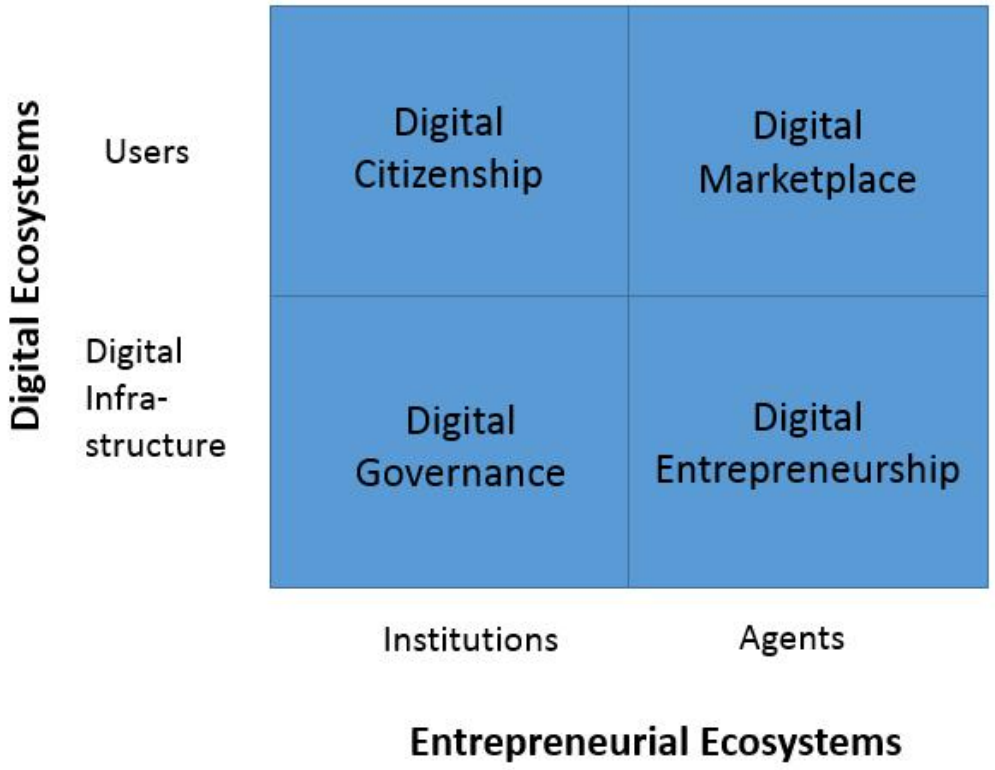
Agents:
Mark At the Stanford Summit 2016

Institutions

The Merging of Two Ecosystems



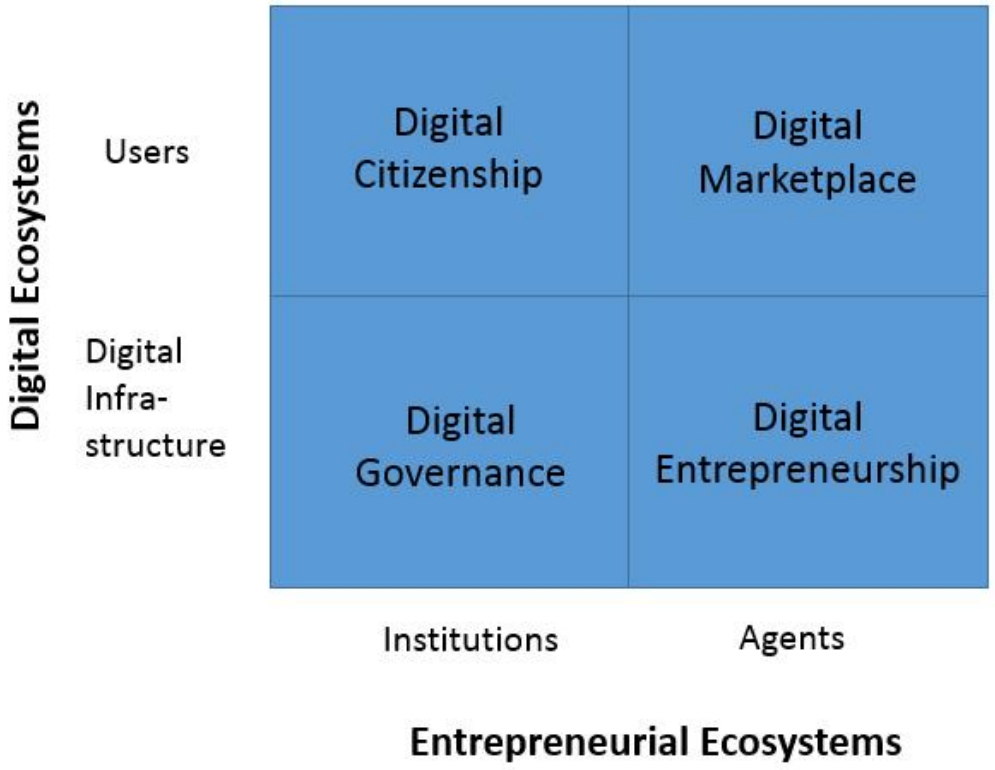
Conceptual Framework of Digital Entrepreneurship Ecosystems



Digital Infrastructure Governance

- *There are certain kinds of rules of law that will optimize digital infrastructure standards for entrepreneurial activities*.
- As digital infrastructure is decentralized and tends to be subject to bottoms-up discourse in the setting up of standards, digital governance that is socially-embedded, open without dominant players, and rely more on informal than formal process toward legitimacy will be beneficial to a sustainable digital entrepreneurial ecosystem.
- *Openness, transparency*

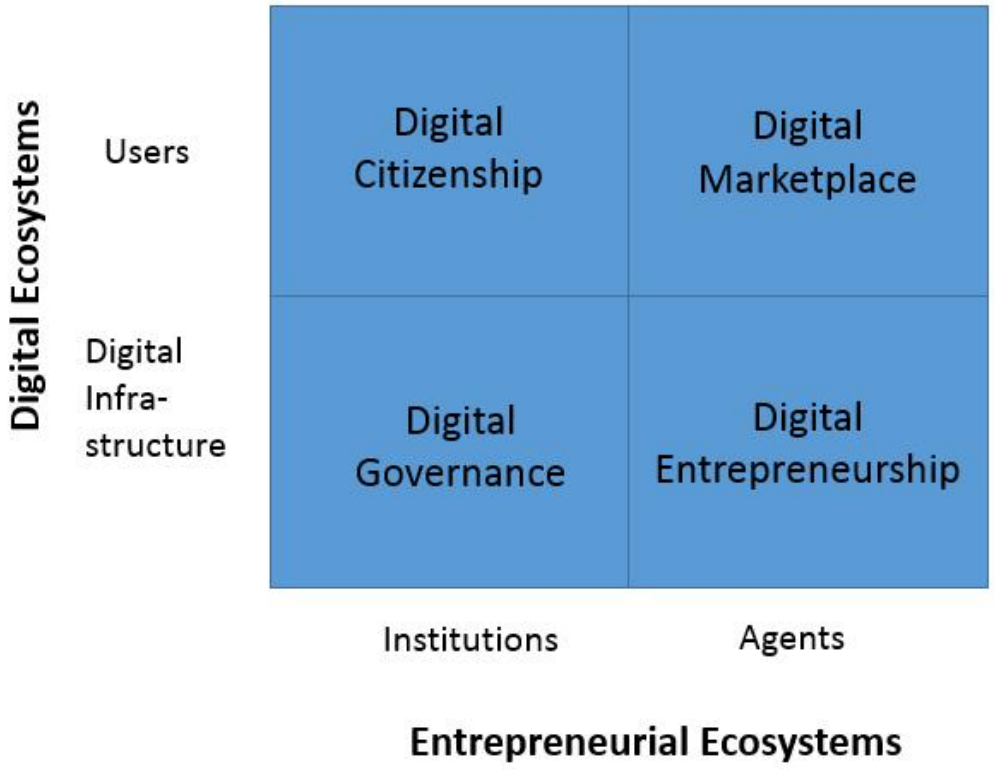
Conceptual Framework of Digital Entrepreneurship Ecosystems



Digital Users Citizenship

- *There are certain kinds of rules of law that will optimize users' participation and at the same time allow entrepreneurial activities.*
- As users are voluntarily engaging in discourse with other users online in a wide range of issues and behaviours, a highly participatory and empowered digital citizenship that is self-governed, self-monitored, and self-controlled will be more beneficial to a sustainable digital entrepreneurial ecosystem.
- *Self-regulated, active participation*

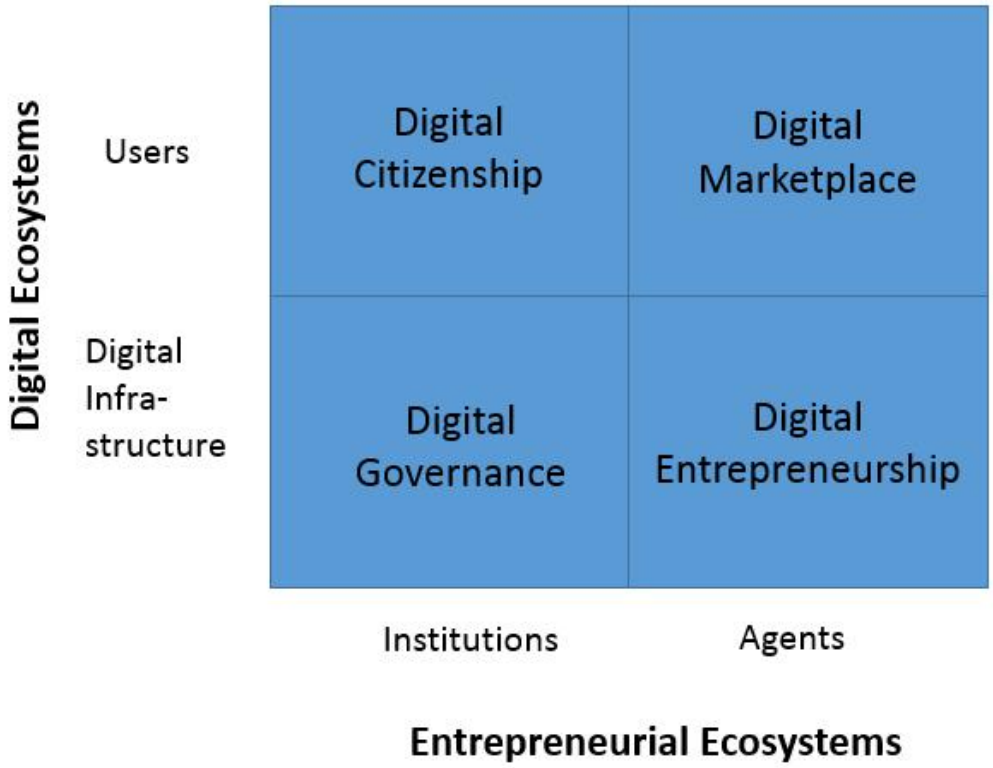
Conceptual Framework of Digital Entrepreneurship Ecosystems



Digital Entrepreneurship

- *There are certain conditions under which entrepreneurs have the necessary skills to exploit digital infrastructure and conduct productive entrepreneurial activities.* Agents' ability to innovate and utilize inventions continues as digital infrastructure becomes more inclusive and open. The advancement of digital infrastructure will benefit from more participation from agents.
- It is our proposition that digital entrepreneurship in which agents can freely participation in innovation in digital infrastructure will be more beneficial to a sustainable digital entrepreneurial ecosystem.
- *Risk taking, actionable, ambitious, innovative*

Conceptual Framework of Digital Entrepreneurship Ecosystems



Digital Global Marketplace

- The digital marketplace is the interaction of *agents and users* in e-social network based business, e-commerce and digital services including e-health, e-education, and e-government. These are multisided platforms.
- *There are certain combinations under which entrepreneurs will optimize opportunity recognition and exploit such opportunities stemming from the users participation, and at the same time users embrace such opportunity exploitation and allow entrepreneurial activities to take place.*
- *Active users, engaged participation, vibrant*

Cell 1 to others

- 1 to 2: Digital governance impact digital citizenship, the more open, the more engaged digital citizenship. The more explicit rules of law, the more engaged digital citizenship.
- 1 to 4: Digital governance impact digital entrepreneurship in that entrepreneur will engage in productive entrepreneurship if digital property rights are enforced and digital rule of law is transparent.
- 1 to 3: Good digital governance will lead to a better, deeper and more extensive digital 'market' place.

Cell 2 to others

- 2 to 1: The more engaged digital citizenship, the more involved they are in the process of digital governance.
- 2 to 3: The more engaged and participation of digital citizenship, the more vibrant the digital 'market' place.
- 2 to 4: The more engaged digital citizenship, the more likely digital entrepreneurship will emerge, as user-entrepreneurs emerge from users.

Cell 3 to others

- The more vibrant the digital marketplace, the more digital entrepreneurs will emerge.
- The more vibrant the digital marketplace, the more digital user citizenships in terms of their skills will be improved.
- The more important the digital marketplace, the more influence it will have on digital infrastructure governance.

Cell 4 to others

- 4 to 3: The success of digital entrepreneurship leading to the digital 'market' place depends on their interactions with digital governance and digital citizenship.
- *4 to 2: Users and Business Models;* The philosophical foundation of users' willingness to share, contribute, volunteer time and effort in online communities becomes the major game changing element in business models in the digitalization process.

Drilling into the Digital Marketplace

- Technology
- Product Platforms
- Multi-sided Platforms
- Matchmakers
- Transaction costs
- Value Creation
- Unicorns

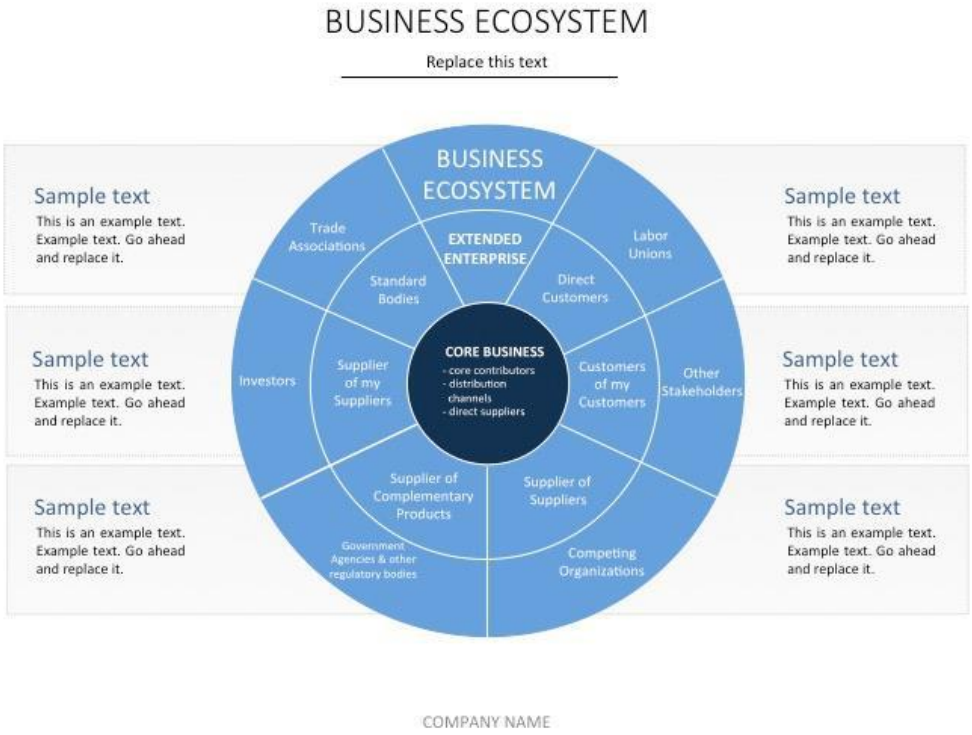
The Platform Age and Technology

- More powerful chips: billions of transistors
- The Internet: the physical networks
- World Wide Web; content
- Mobil Broadband communication: speed
- Programming languages: we all speak it
- The Cloud: computational resources

Business Platforms:

Cooperation and Competition

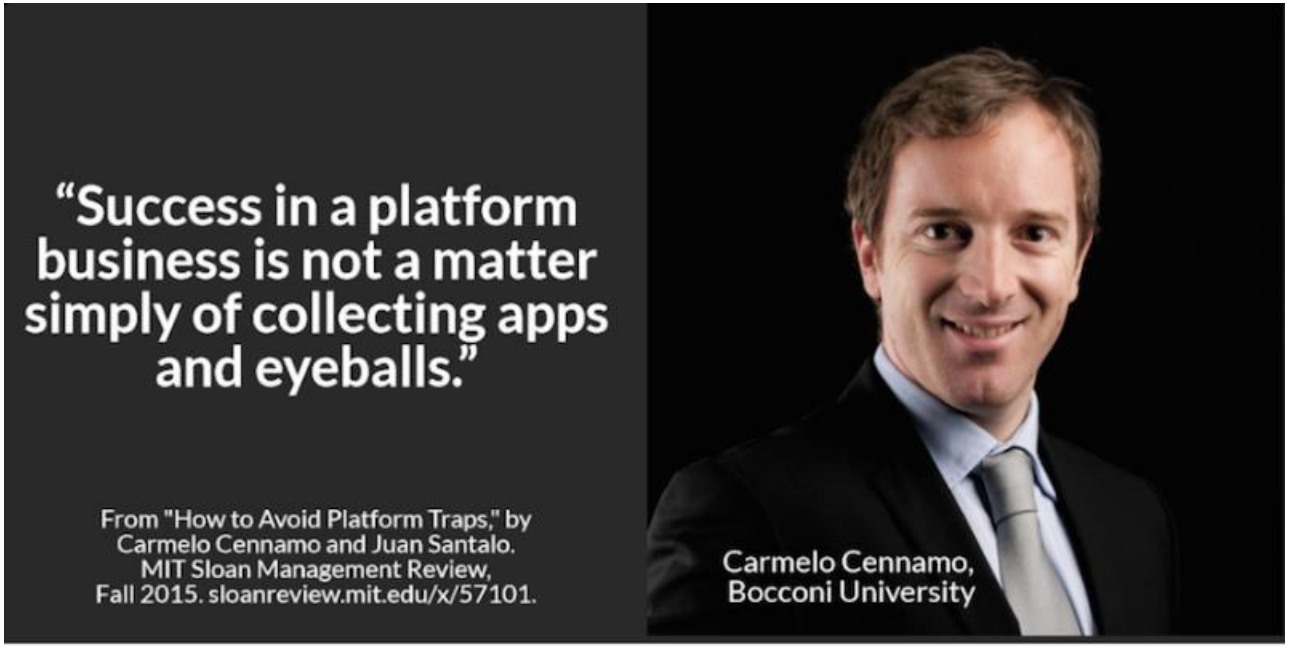
Moore, 1993 HBR



Multisided Platforms

- **Multisided platforms** (MSPs) are technologies, products or services that create value primarily by enabling direct interactions between two or more customer or participant groups. J. Tirol (2004) wins Noble Prize 2014
- A multisided platform (Matchmakers) is one of the toughest business models. Evans and Schmalensee (2015)

A Tough Business



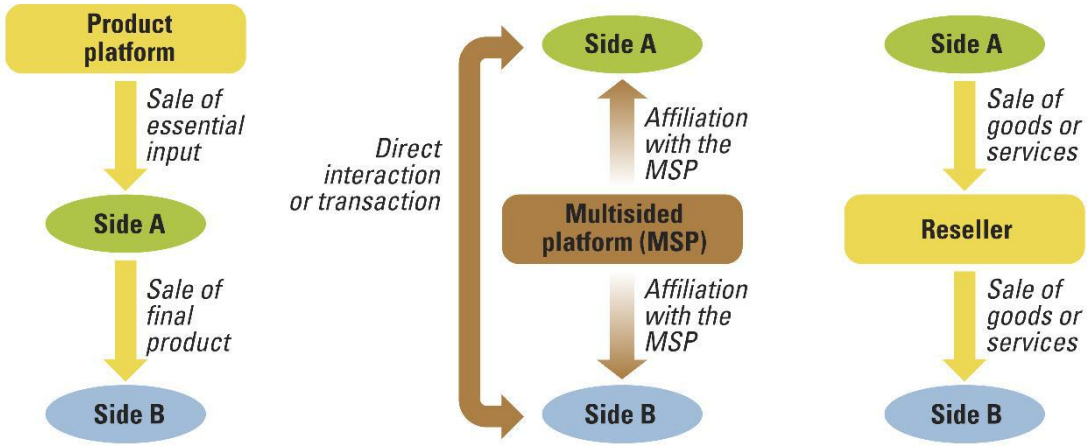
How do you create value? Reduce Transaction Costs:

The automation of work and the digital disruption of business models place a premium on leaders who can create a vision of change and frame it positively.

Mutisided Platforms

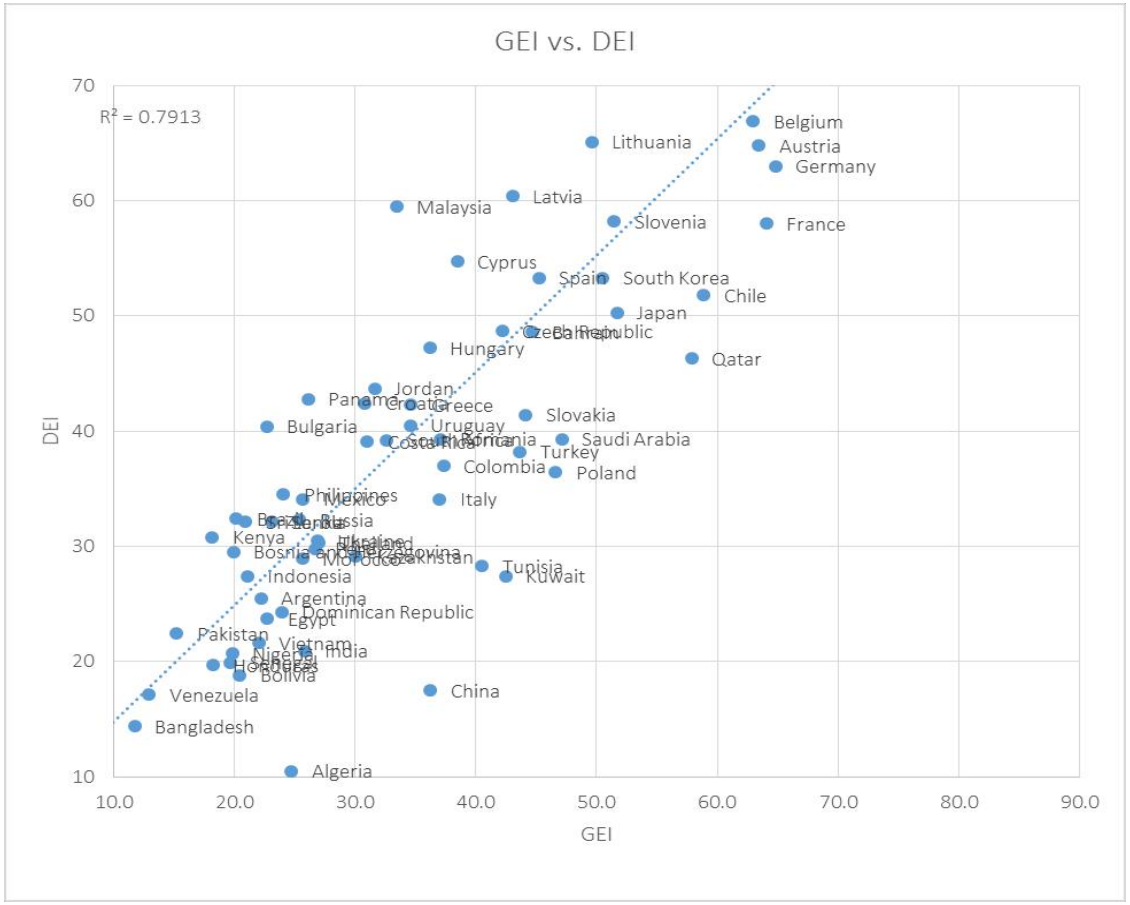
HOW MULTISIDED PLATFORMS DIFFER FROM PRODUCT PLATFORMS AND RESELLERS

There are two key characteristics of a multisided platform: (1) each group of participants ("side") are customers of the MSP in some meaningful way, and (2) the MSP enables a direct interaction between the sides. Product platforms violate the first requirement: The ultimate customer is not a customer of the platform provider. Resellers violate the second requirement: There is no direct interaction between the sides.

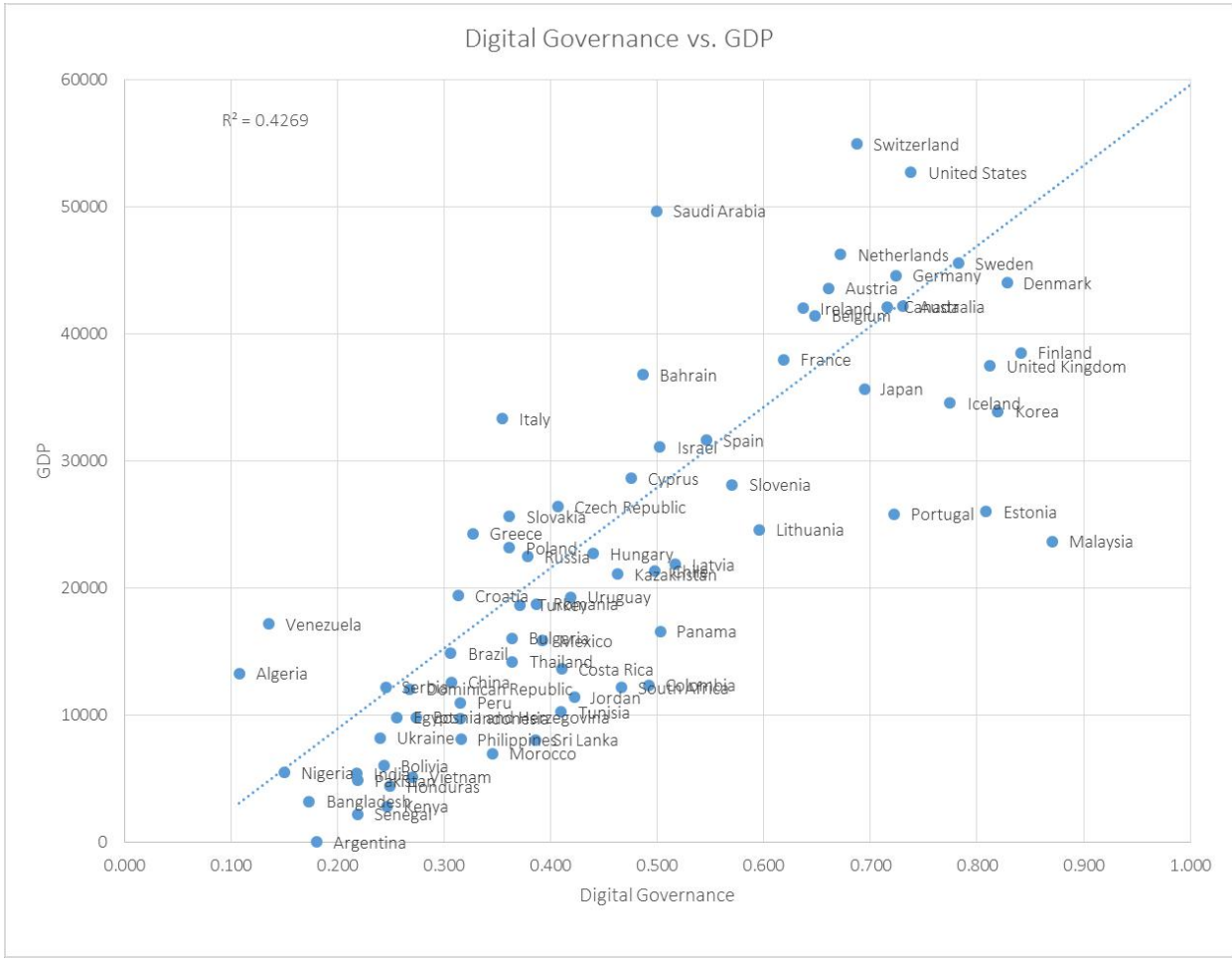


google - Google Search.html

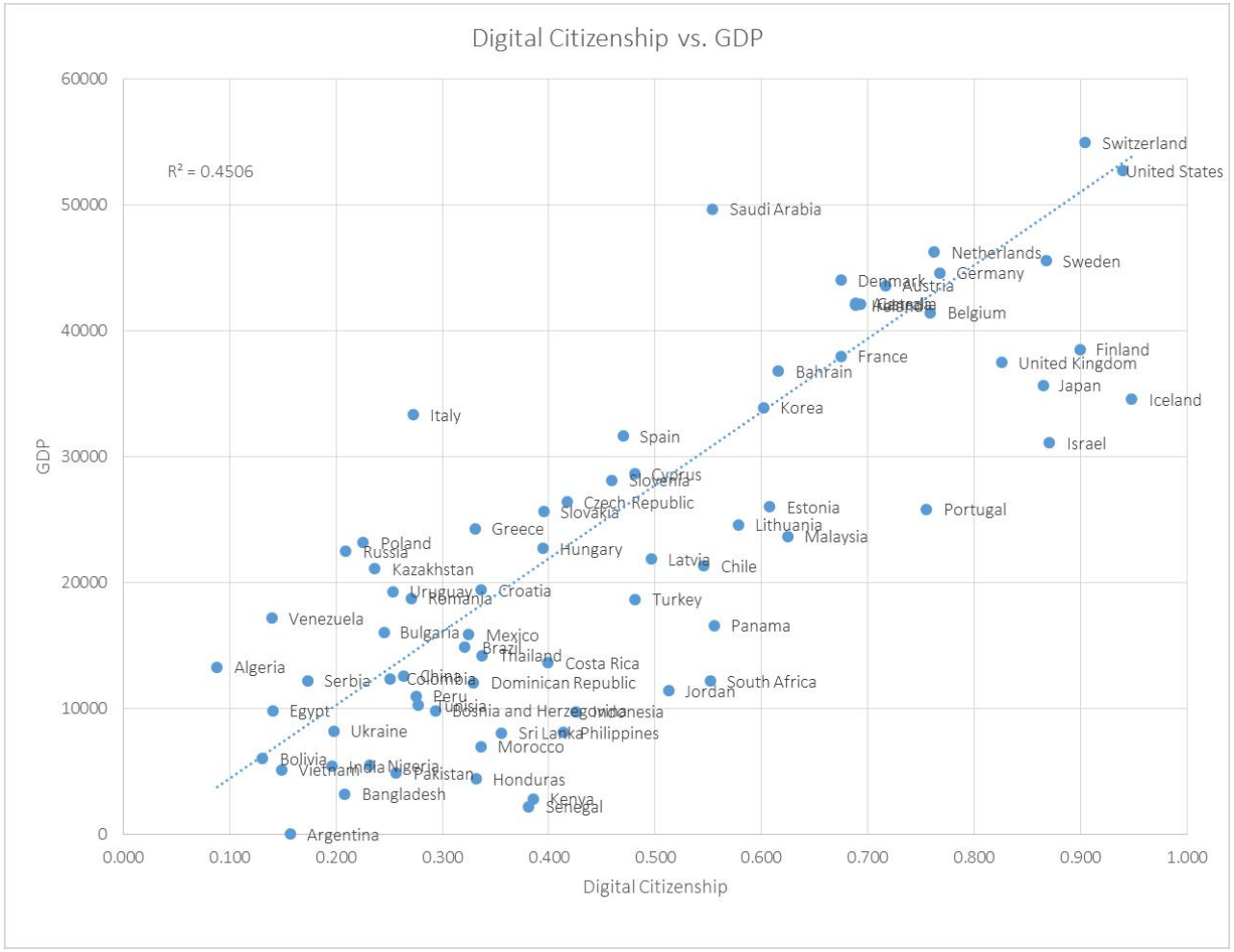
GEI vs DEE


GEI vs. DEI
R² = 0.7913
DEI
GEI
70
60
50
40
30
20
10
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
90.0
Belgium
Austria
Germany
Lithuania
Latvia
Malaysia
Slovenia
France
Cyprus
Spain
South Korea
Chile
Japan
Hungary
Qatar
Jordan
Panama
Greece
Slovakia
Bulgaria
Uruguay
Saudi Arabia
Turkey
Colombia
Poland
Philippines
Mexico
Italy
Kenya
Tunisia
Kuwait
Indonesia
Argentina
Dominican Republic
Egypt
Pakistan
Vietnam
India
Bolivia
Venezuela
China
Bangladesh
Algeria

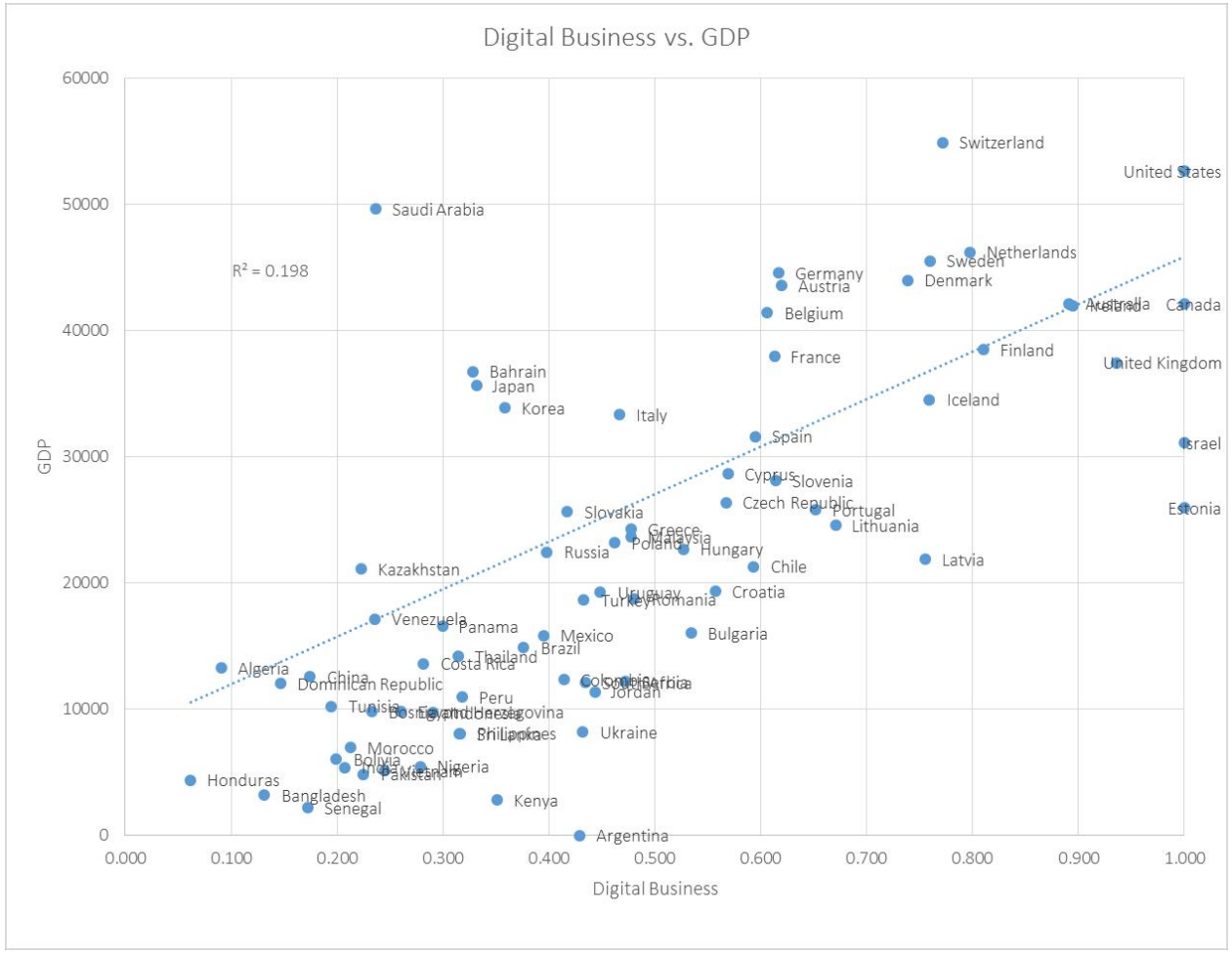
Digital Governance vs GDP



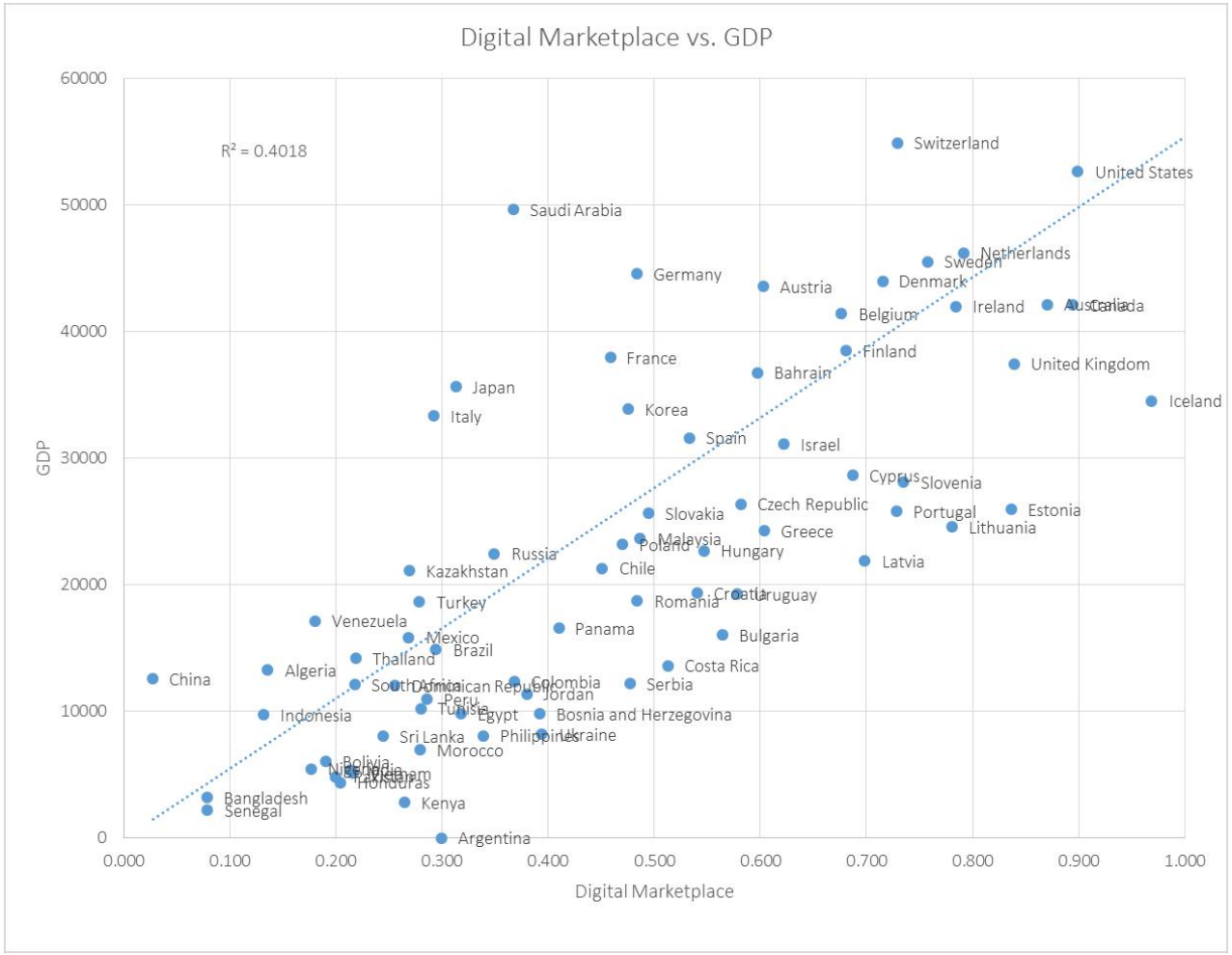
Digital Citizenship vs GDP



Digital Business vs GDP



Digital Marketplace vs GDP



Impact on the EU Economy

- 28 billion Euros in Revenues in 2016

- PWC 2016 Assessing the size and presence of the collaborative economy in Europe

Entrepreneurship Research

- First, entrepreneurship research in the digital age needs to be expanded to include literature from other disciplines such as Economics, Political Science, Marketing, Social Psychology, Strategy and information systems.

Entrepreneurship Research

- Second, entrepreneurship research should focus more on the digital economy toward understanding high impact, high potential, and high growth business that is scalable and creates value using digital technologies

Entrepreneurship Research

- Third, while digital technologies are global, the creation of digital companies remains local. The research agenda for understanding the digital entrepreneurial ecosystem should continue to investigate clusters, regional as well as country comparisons.
- The impact of culture, legal systems, and economic development on digital infrastructure governance, digital user citizenship, digital entrepreneurship, and digital marketplace are particularly important areas that need investigation.

Entrepreneurship Research

- Forth, while a digital entrepreneurial ecosystem is a robust, self-organizing and scalable architecture that can solve complex dynamic problems, then what constitutes ecosystem management?
- What actors should be allowed to intervene? Should intervention take place at the system and/or subsystem level?

Entrepreneurship Research

- Fifth, given that the digital marketplace has tilted in favor of empowered consumers digital entrepreneurial research needs to investigate the inner-workings of the users' decision-making process, from both internal and external influences, in order to understand how entrepreneurial agents can spot such opportunities and extract and capture value from users.
- Understanding consumers' psychology and social psychology are thus important in digital economy.

Entrepreneurship Research

- Finally, given that the concept of digital entrepreneurship ecosystems introduced here is a multi-faceted phenomenon that spans interdisciplinary knowledge, a range of research methods will be suitable to address this phenomenon.
- Empirical work that describes the interactions of the quadrants in the framework is particularly important.

Thank You

PUBLIC POLICY AND SME INTERNATIONALISATION

Public Policy and SME Internationalisation by Dr. Jonathan Potter

Dr. Jonathan Potter

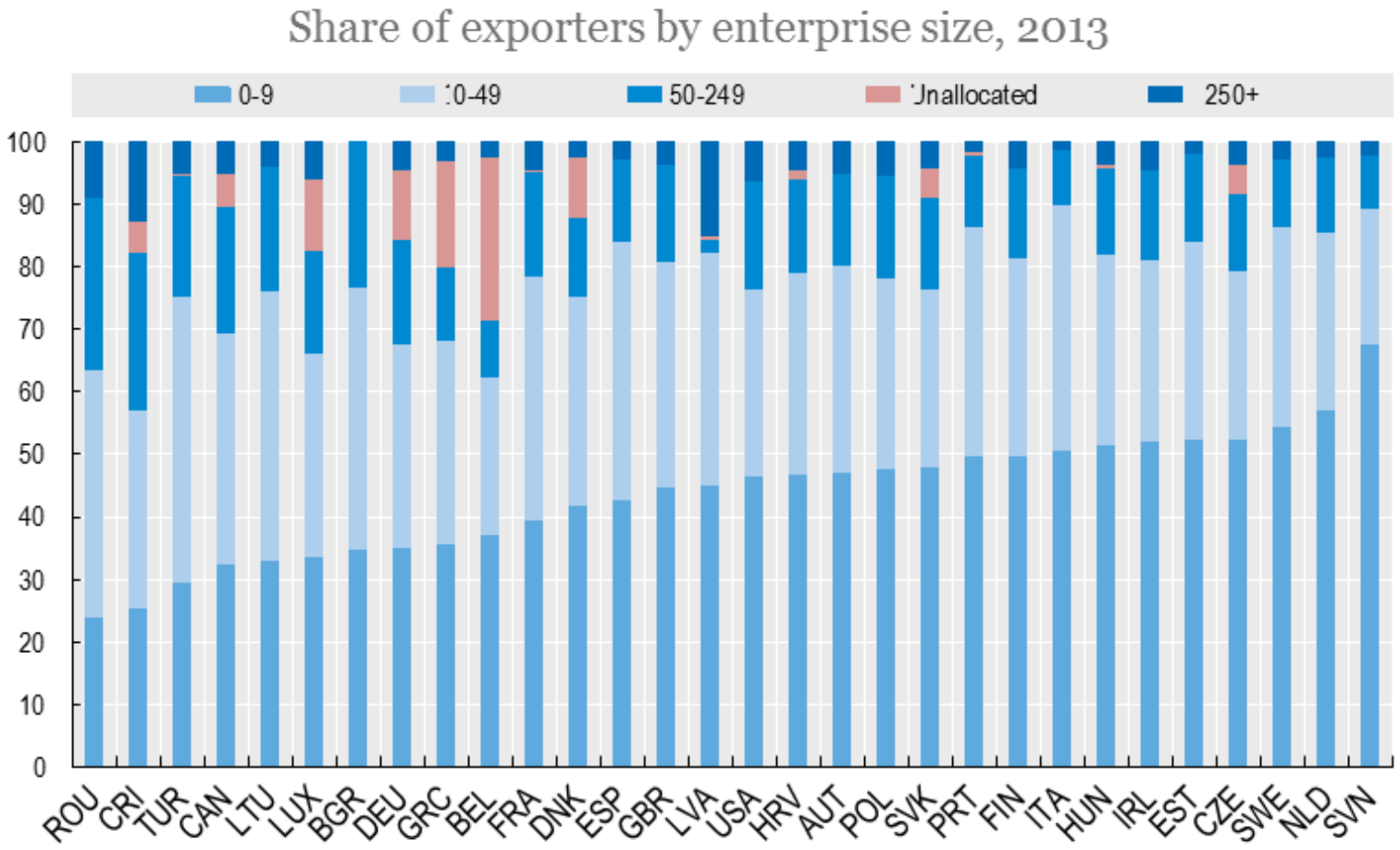
Senior Economist

Centre for Entrepreneurship, SMEs, Local Development and Tourism

Structure of presentation

- How SMEs perform in internationalisation
- The link with SME productivity
- Barriers faced by SMEs
- Existing public policy and how it could be strengthened
- The policy implications of digitalisation

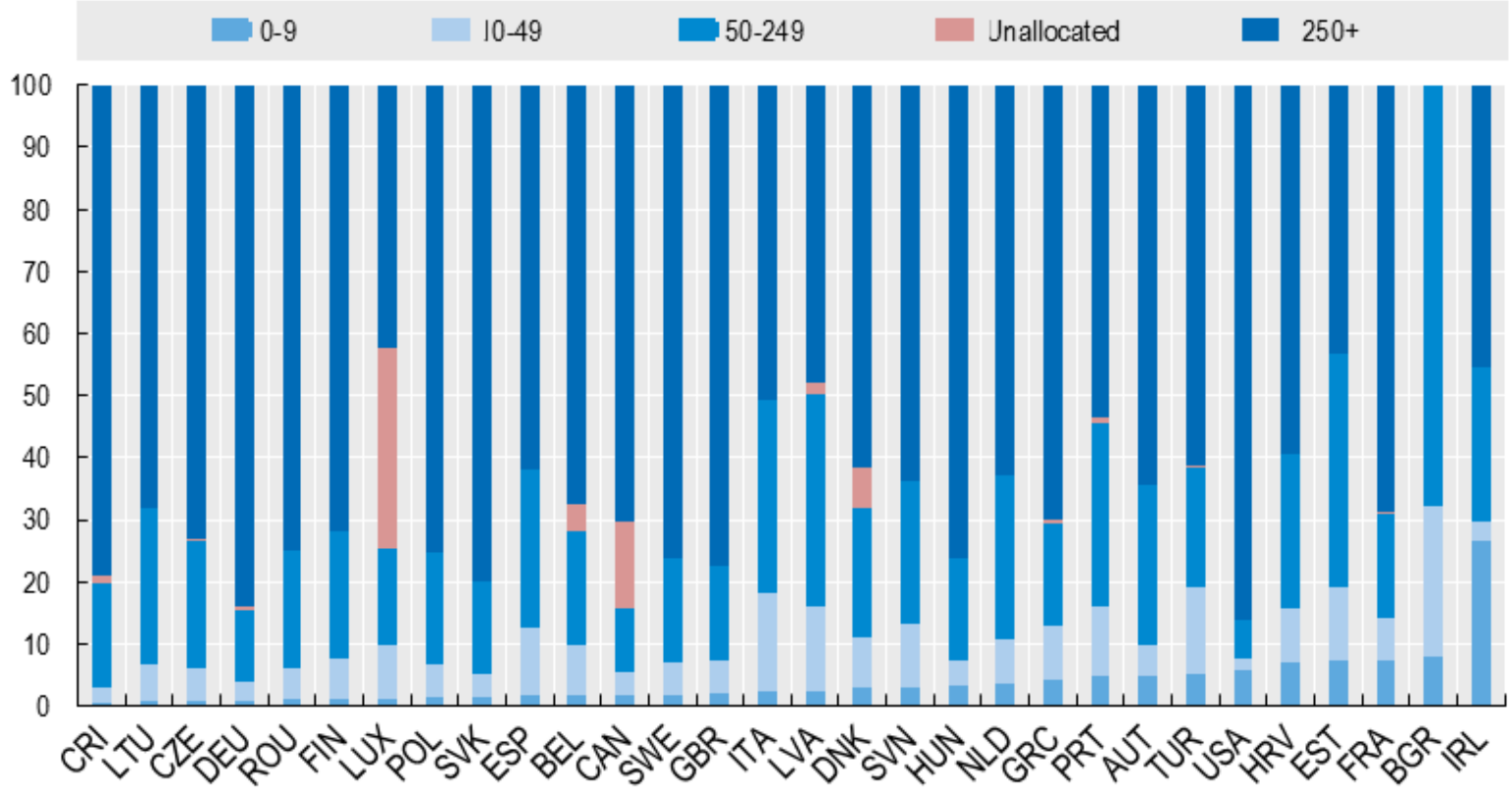
Micro and small firms represent the vast majority of exporting firms



Source: OECD (2016), *Entrepreneurship at a Glance 2016*, OECD Publishing, Paris.

But they account for a small proportion of value of exports

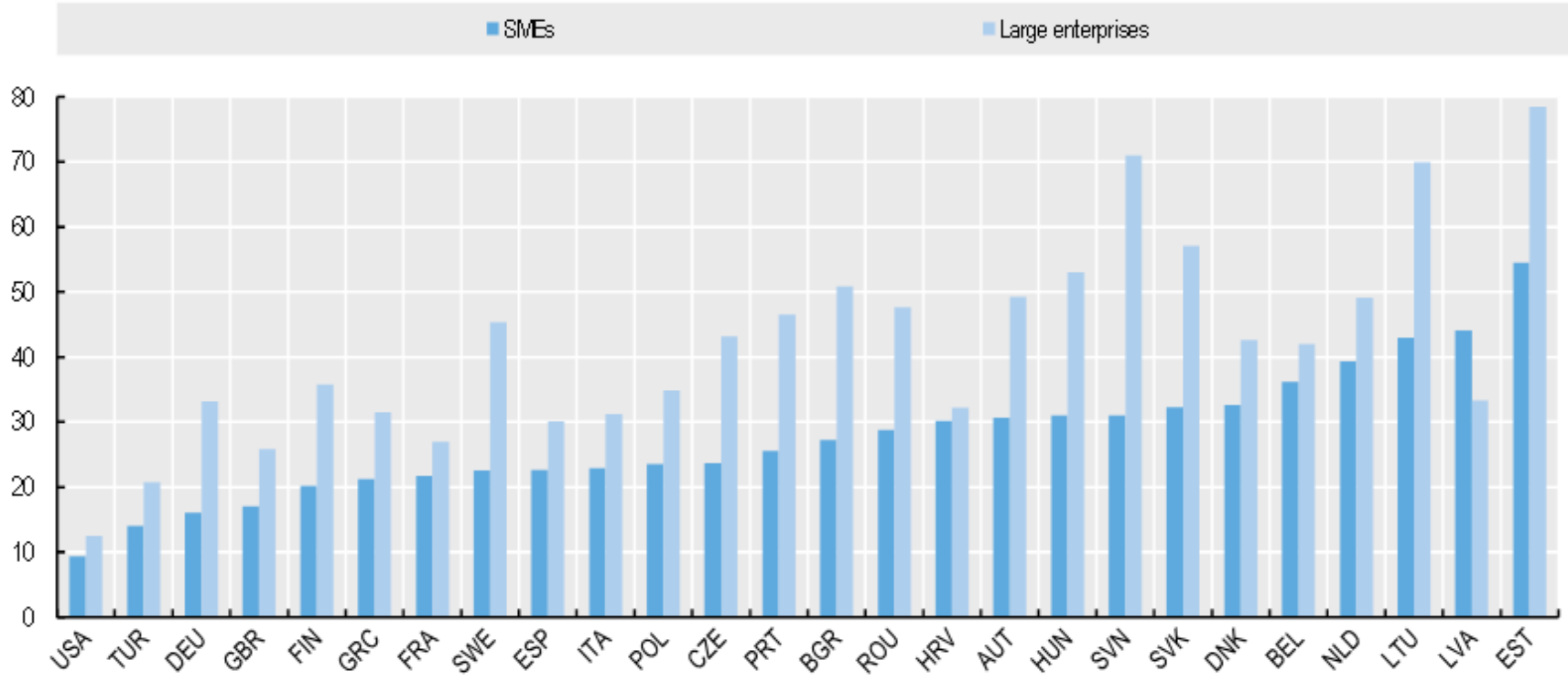
Share of export value by enterprise size, 2013



Source: OECD (2016), *Entrepreneurship at a Glance 2016*, OECD Publishing, Paris.

And have a lower share of exports in turnover than large firms

Export value to turnover ratio by enterprise size, 2013

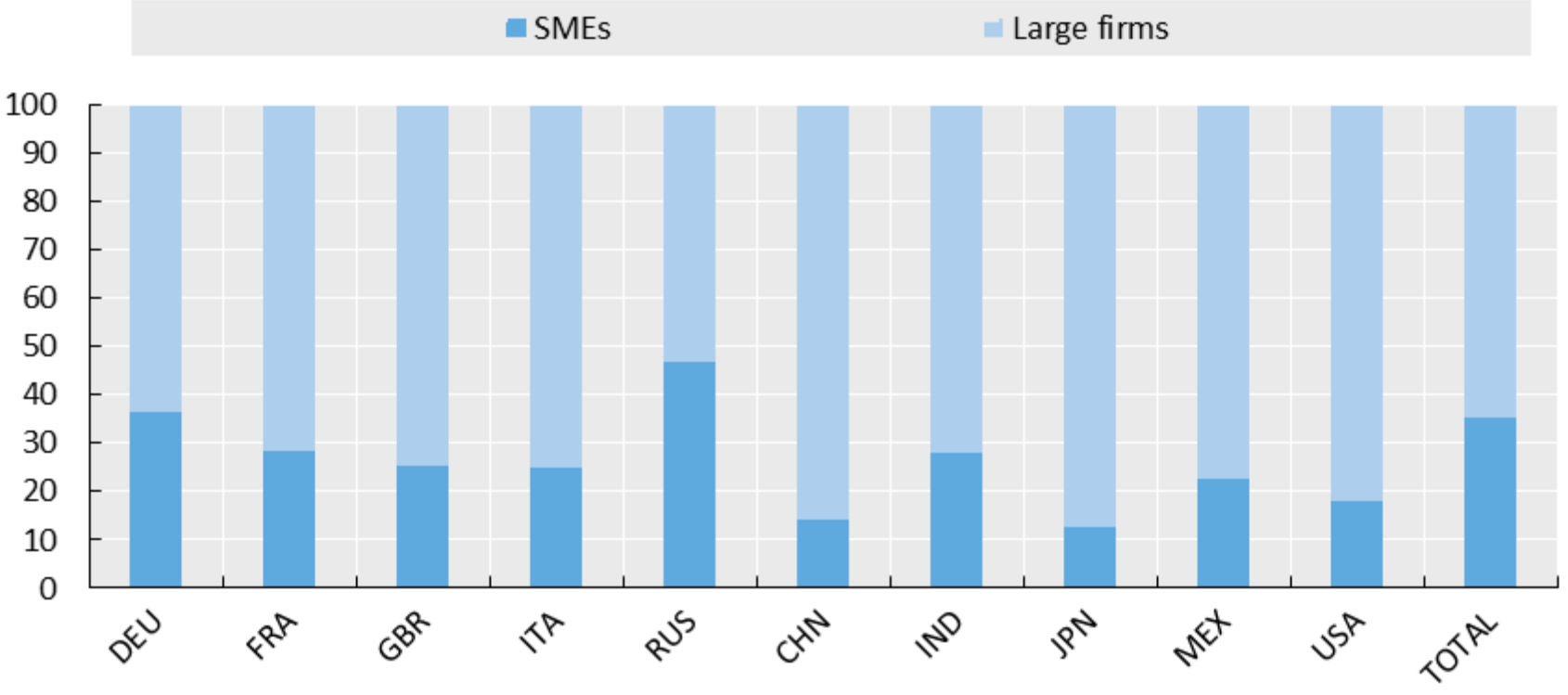


Source: OECD (2016), *Entrepreneurship at a Glance 2016*, OECD Publishing, Paris.

SMEs are more likely to export to close markets

The case of Poland, 2013

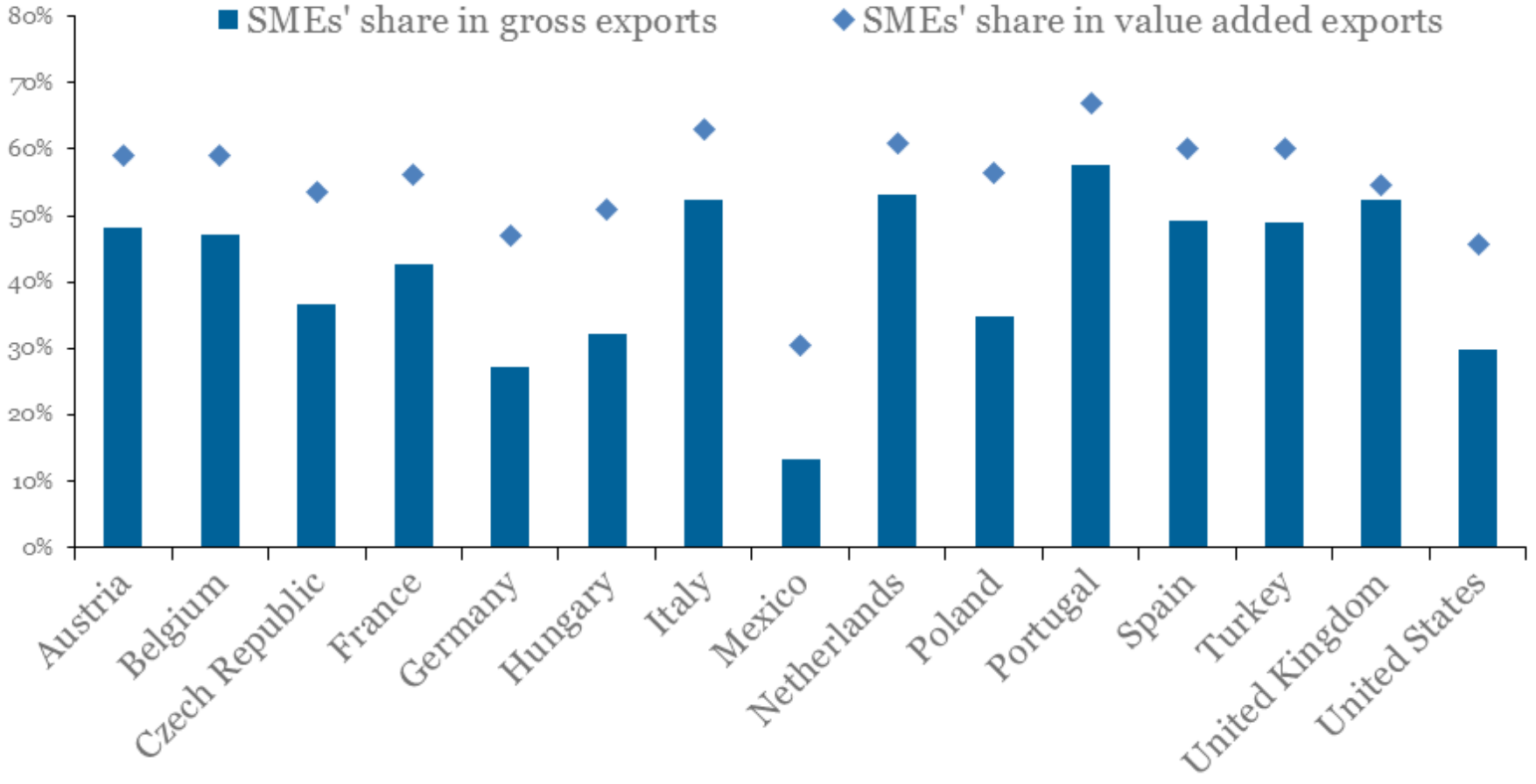
Percentage of total value of exports to partner country



Source: OECD (2016), *Entrepreneurship at a Glance 2016*, OECD Publishing, Paris.

- Polish SMEs export more to Russia than to southern EU countries; very few export to Asia or North America

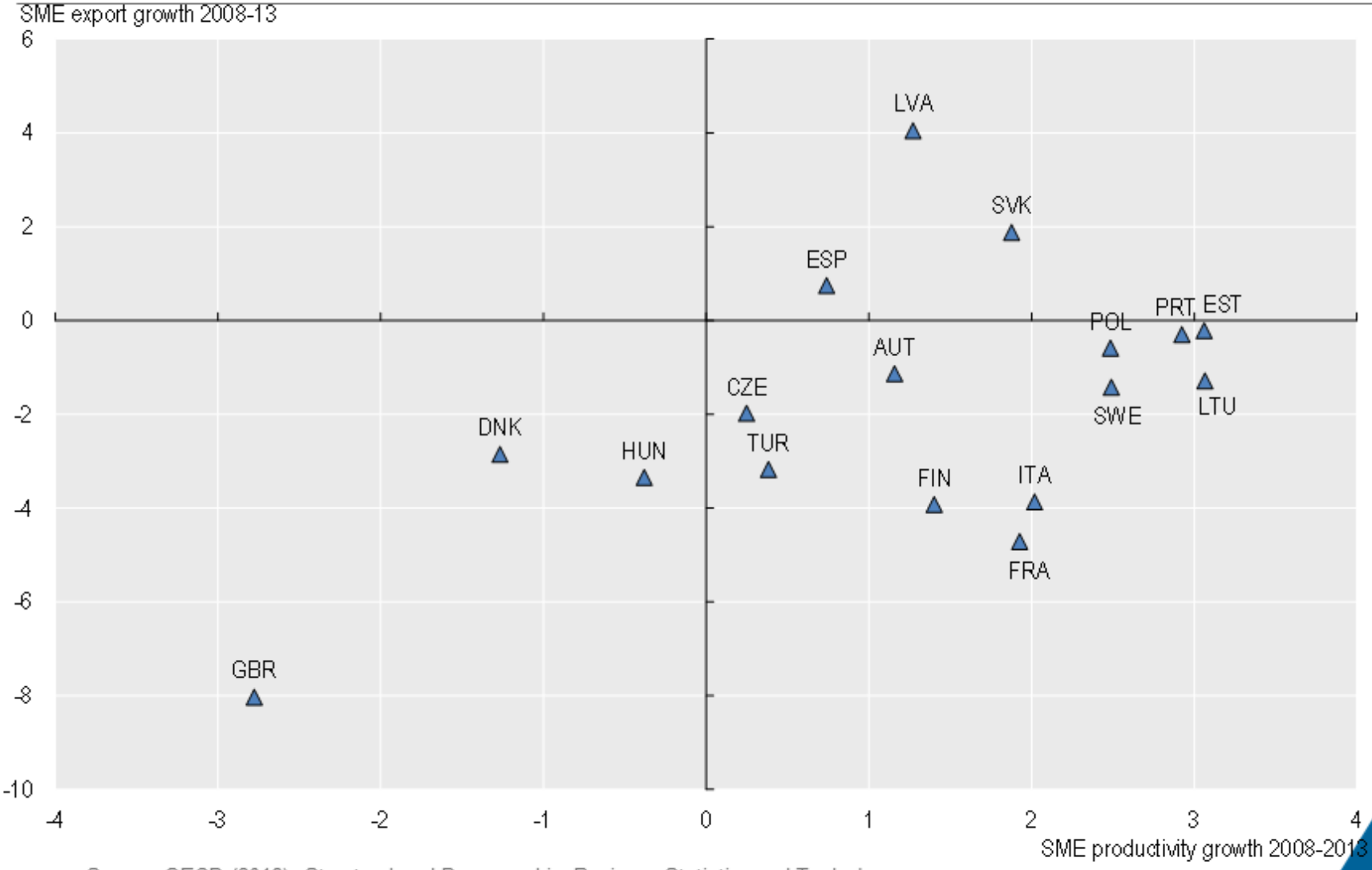
Although SMEs also export indirectly



Value added exports of SMEs = Direct value added in SMEs' exports + value added in inputs produced by SMEs and used by exporting firms

Source: OECD Statistics Directorate

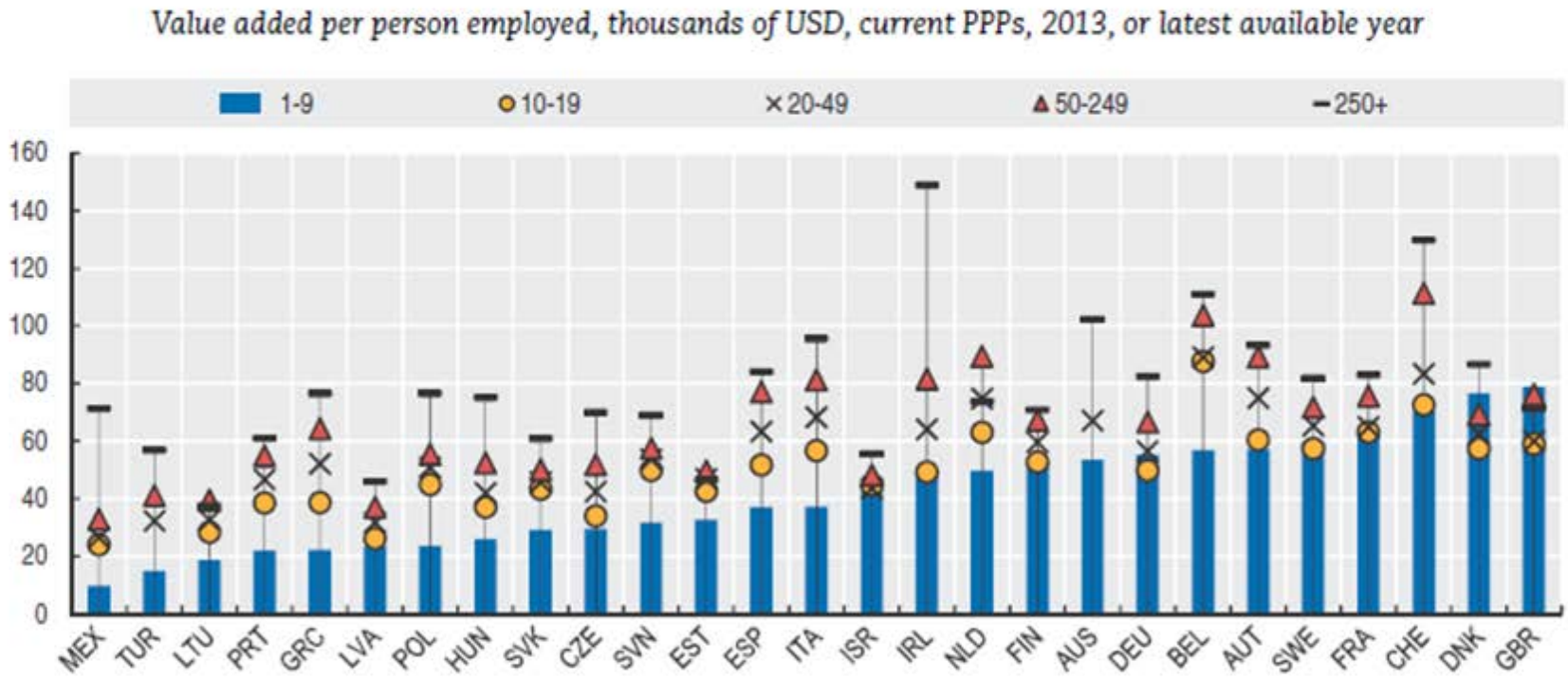
There are positive links between SME productivity and exporting



Source: OECD (2016), Structural and Demographic Business Statistics and Trade by enterprise characteristics (databases)

But SMEs tend to have lower productivity than large firms

Labour productivity by enterprise size, total business economy



Source: OECD (2016), Entrepreneurship at a Glance 2016

Policy makers see barriers in capabilities, information and financing

Type of barrier	Nature of barrier
Capabilities	Inadequate quantity of and/or untrained personnel for internationalisation
	Lack of managerial time to deal with internationalisation
	Inability to contact potential overseas customers
	Constraints developing new products for foreign markets
	Meeting export product quality/standards/specifications
Information	Limited information to locate/analyse markets
	Identifying foreign business opportunities
	Unfamiliar exporting procedures/paperwork
	Unfamiliar foreign business practices
Finance	Shortage of working capital to finance exports

Although not all SMEs are the same

Type of firm	Issue for them
The Curious – Have considered international activity in the past	Not sure if there is a market
The Frustrated – Have experience of international activity but are currently inactive	Difficult to get a slice of the profit
The Tentative – Have limited experience of international activity and some skills, but major problems	Need a list of potential customers
The Enthusiastic – Have considerable experience and keen to grow but experiencing barriers	Need time to think how to be more strategic and proactive
The Successful – Have extensive experience with some major successes	Need to build skills to service markets at a distance

Typical policy interventions - finance

- Insurance against export-related credit risk
  - In Estonia, the Credit and Export Guarantee Fund "KredEx" insures SMEs against export related credit risks
- Guarantees of working capital
  - The Finnish Ministry of Trade and Industry provides financing and guarantees to support SME working capital needs and internationalisation efforts
- Soft loans to targeted enterprises
  - The Italian Ministry of Foreign Trade provides insurance and financing schemes for export activities, including soft loans for export activities by companies in Southern Italy.

Typical policy interventions – information

- Information on export markets
  - The Investment and Trade Development Agency of Hungary (ITDH) provides customised one stop service, including information about export markets, promotion, and contact facilitation.
- Identification of contacts abroad
  - The Trade Council of Denmark offers assistance for SMEs through its network of representations around the world. The assistance includes market analysis and partner identification and facilitation.
- Attendance at trade fairs and on trade missions
  - The 'Globally active initiative' in Germany provides assistance, including trade fair and market development support to SMEs.

Typical policy interventions – management practices and skills

- Training and coaching
  - Ubifrance, the French international business development agency, offers an 18-month export coaching programme
  - The Israel Export Institute has a Small Exporters Assistance Centre that offers training, consultancy and guidance for first-time and small exporters. Its training tends to be one-off courses and seminars

An example of an integrated package – Ireland

Name	Target
Export Awareness seminars	Regular seminars for potential exporters to increase awareness
Exploring Export workshops	Workshops for pre-exporters, helping with market research, and identifying needs for training and planning
Get Export Ready Programme	Practical measures for new and early stage exporters focusing on export readiness, the importance of research, developing a value proposition, and the skills of export selling. Workshops, seminars, training, mentoring, access to market information, online "how to" guides, self-assessment tools, help-desk.
First Flight Programme	Help to first time exporters and currently exporting SMEs to manage the risk of entering new markets. Market readiness assessment to help SMEs research, prepare and develop and export strategy. Aimed at high growth potential start-ups. Includes both training and mentoring.
Market access grant	Up to 50% of EUR 150,000 of eligible costs to undertake an intensive six month market research project.

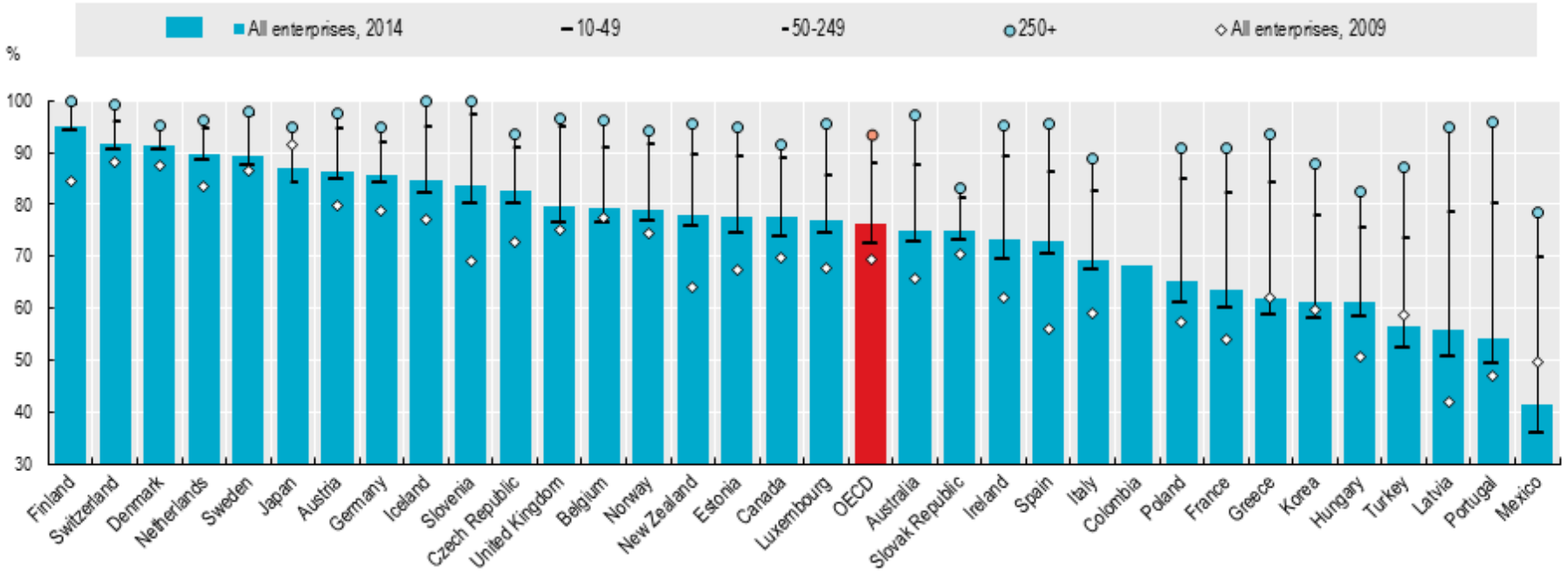
Potential areas for policy improvement

- Recognise the importance of increasing SME productivity to supporting SME internationalisation
- Shift the balance of internationalisation support from information provision and financing more towards capability building
- Increase the segmentation of internationalisation support based on the experience of the SME

Many SMEs still lack a website or home page

Enterprises with a website or homepage by size, 2009 and 2014

As a percentage of enterprises in each employment size class

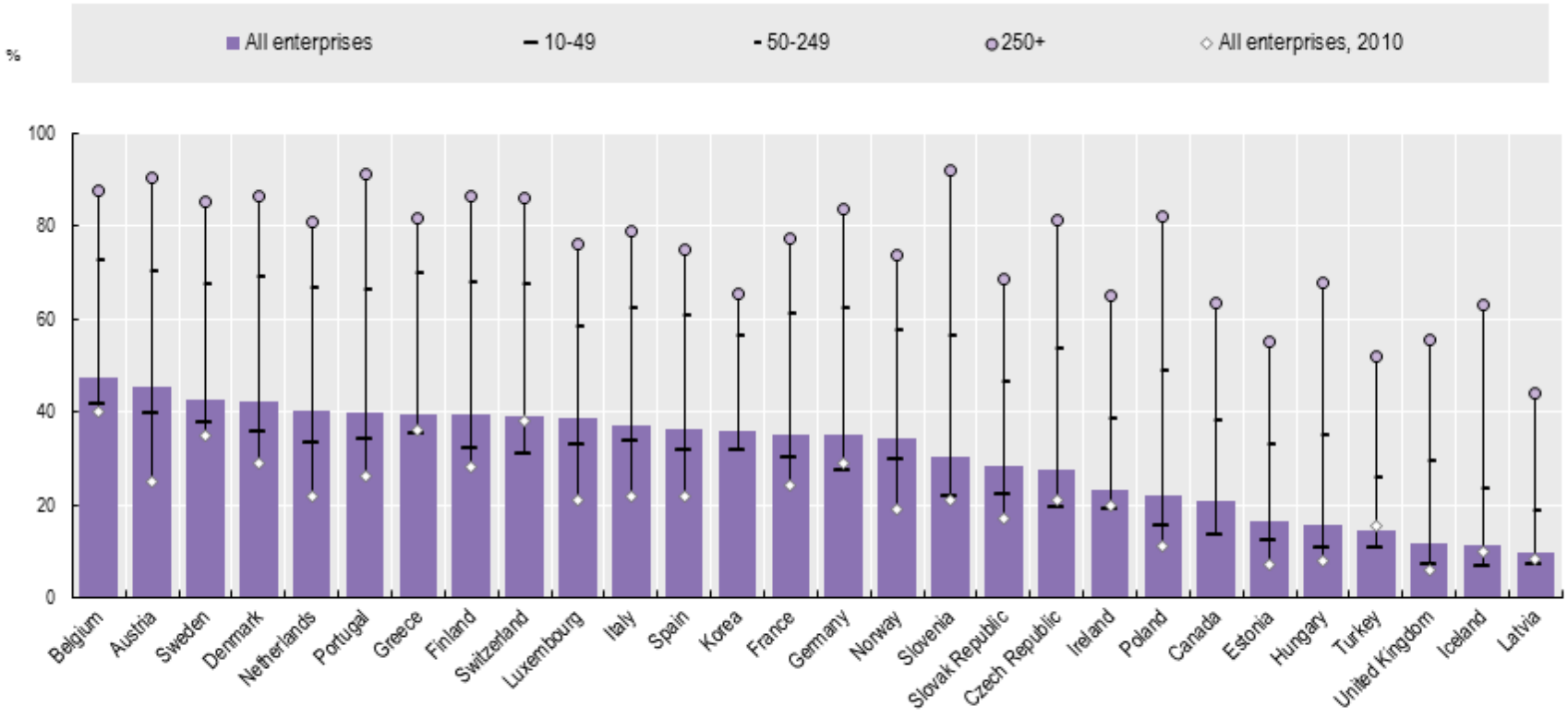


Source: OECD (2016) Entrepreneurship at a Glance

Relatively few SMEs use Enterprise Resource Planning software

Use of Enterprise Resource Planning software by size, 2010 and 2014

As a percentage of enterprises in each employment size class



Source: OECD (2016) Entrepreneurship at a Glance

Potential new internationalisation interventions based on digitalisation

- Provide information on how to address digital security risks
- Offer online advice and tools on how to internationalise e-commerce (e.g. payment options, VAT and customs duties)
- Offer financial subsidies to train or hire staff with key digital skills
- Offer coaching and mentoring for digital technology adoption

Conclusions

- There are major gaps in internationalisation performance between SMEs and larger firms
- The barriers include financing, information and capabilities
- Policy should increasingly emphasise integrated packages that grade up support according to SME interest and experience

- New policies are needed to support SMEs in taking internationalisation opportunities through digitalisation

15th International Entrepreneurship Forum
(15th IEF) Conference

Conference Theme

The Globalisation and Internationalisation of SMEs AND New Ventures:

Venice, Italy

14-16 December, 2016

Role of SMEs in Global and Technological Scenarios

Mario Volpe

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Keywords

- SME's in Italy
  - Smes model of Innovation?
  - Smes model of Internationalization?
- Local System of Production (districts, filiere, cluster)
- Policies
  - Regional
  - National
- SME's into GVC
- MNE inflow
- Evidence of MNEs effect on local economy
- Take away message

Counterfactual

Italian business environment

- Economic crisis
- Low productivity
- High labour cost
- Bureaucracy
- Political crisis and corruption

But resilience of manufacturing in SME's even in incoming internationalization (inward FDI)

Relevance of SMEs in Italy

	Micro enterprises (1 to 9)	Small enterprises (10 to 49)	Medium enterprises (50 to 249)	SMEs	Large enterprises (≥ 250)	Total
Italian firms population						
Number of enterprises	4,229,730	187,514	21,606	4,438,850	3,602	4,442,452
Share	95.2 %	4.2 %	0.5 %	99.9 %	0.1 %	100.0 %
Number of employees	7,803,370	3,341,020	2,088,952	13,233,342	3,488,868	16,722,210
Share	46.7 %	20.0 %	12.5 %	79.1 %	20.9 %	100.0 %
Italian firms' population excluding self-employment						
Number of enterprises	1,432,368	173,238	21,517	1,627,123	3,600	1,630,723
Share	87.8 %	10.6 %	1.3 %	99.8 %	0.2 %	100.0 %
Number of employees	3,721,119	3,146,850	2,082,889	8,950,858	3,488,224	12,439,082
Share	29.9 %	25.3 %	16.7 %	72.0 %	28.0 %	100.0 %
Industry and production services firms population (self-employment excluded)						
Number of enterprises	827,068	87,059	13,013	927,141	2,174	929,315
Share	89.0 %	9.4 %	1.4 %	99.8 %	0.2 %	100.0 %
Number of employees	1,913,994	1,613,076	1,368,013	4,895,084	1,418,134	6,313,218
Share	30.3 %	25.6 %	21.7 %	77.5 %	22.5 %	100.0 %

Source: CMET Survey, 2013

Firm performance of SMEs

Values of individual factors included in the firm performance component

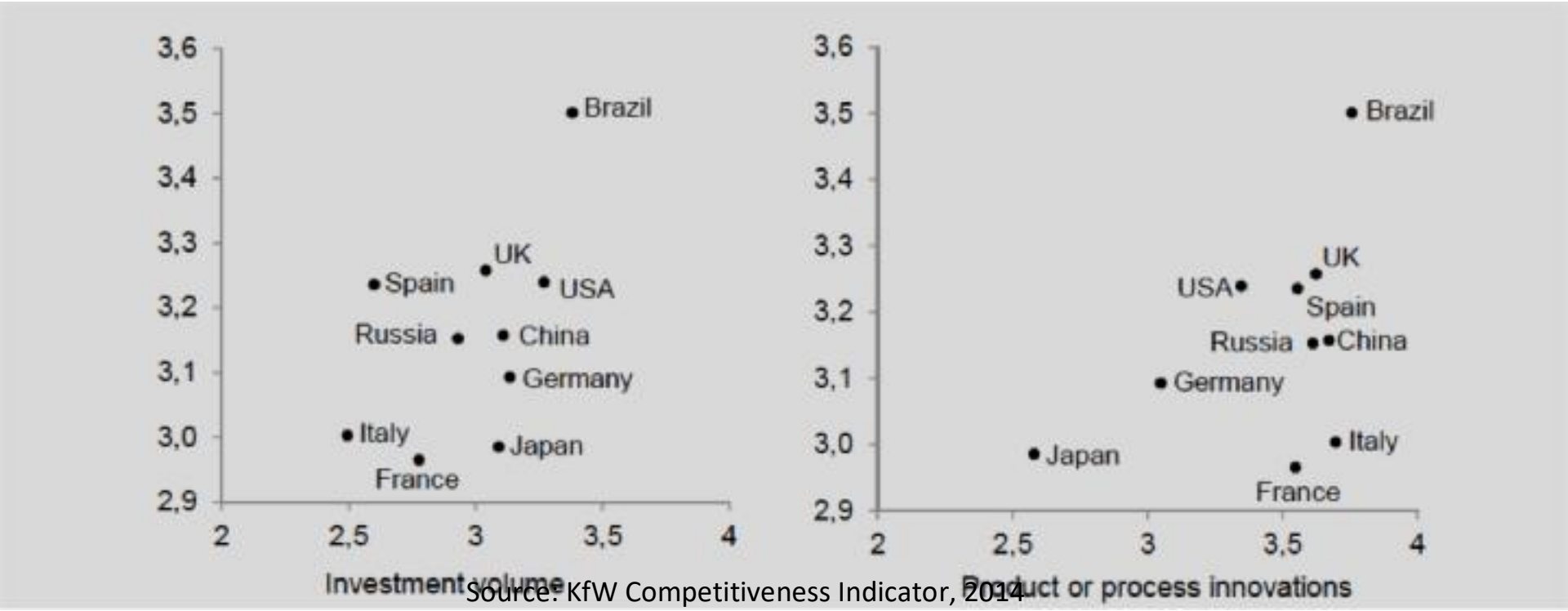
	UK	Brazil	USA	Germany	France	Russia	Spain	China	Italy	Japan
Price	3,30	3,53	3,24	2,85	3,15	3,27	3,16	3,40	3,09	2,97
Quality	3,67	3,50	3,60	3,89	3,44	3,45	3,38	3,16	3,40	3,28
Degree of innovation	3,49	3,43	3,47	3,42	3,22	3,12	3,23	3,11	3,22	3,00
Awareness	3,48	3,50	3,28	3,17	3,40	3,22	3,20	3,07	3,22	2,79
Delivery times	3,43	3,51	3,19	3,75	3,24	3,30	3,30	3,31	3,25	3,31
Service	3,58	3,36	3,53	3,85	3,34	3,30	3,27	3,09	3,11	2,87
Staff and material costs	3,32	3,22	3,14	2,55	3,00	3,01	3,07	3,44	2,92	2,77
Firm performance	**3,47**	**3,44**	**3,35**	**3,35**	**3,26**	**3,24**	**3,23**	**3,23**	**3,17**	**3,00**

Best value — Worst value

Source: KfW Competitiveness Indicator, 2014

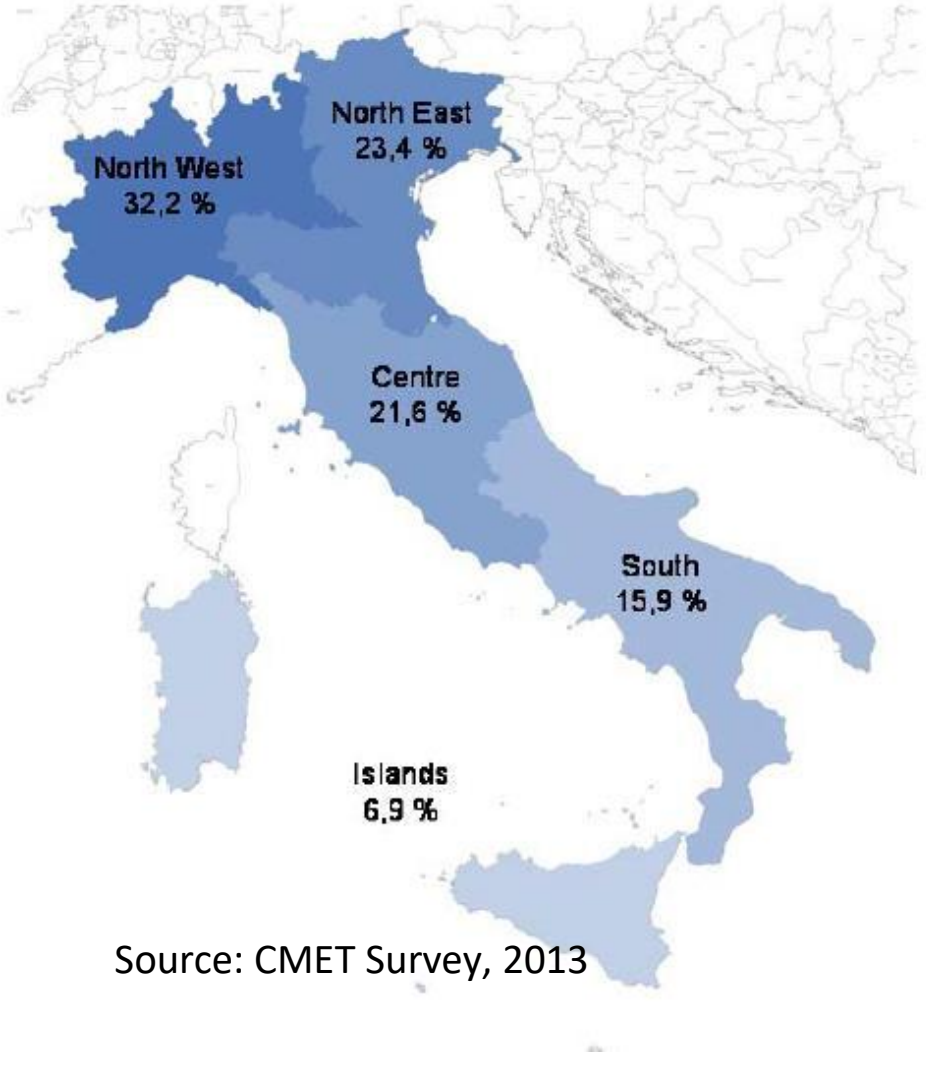
SMEs Investment and Innovation

Positive relationship between investment and innovation activities and the expected development of international competitiveness at country level



Source: KfW Competitiveness Indicator, 2014

Regional Distribution of Italian SME's

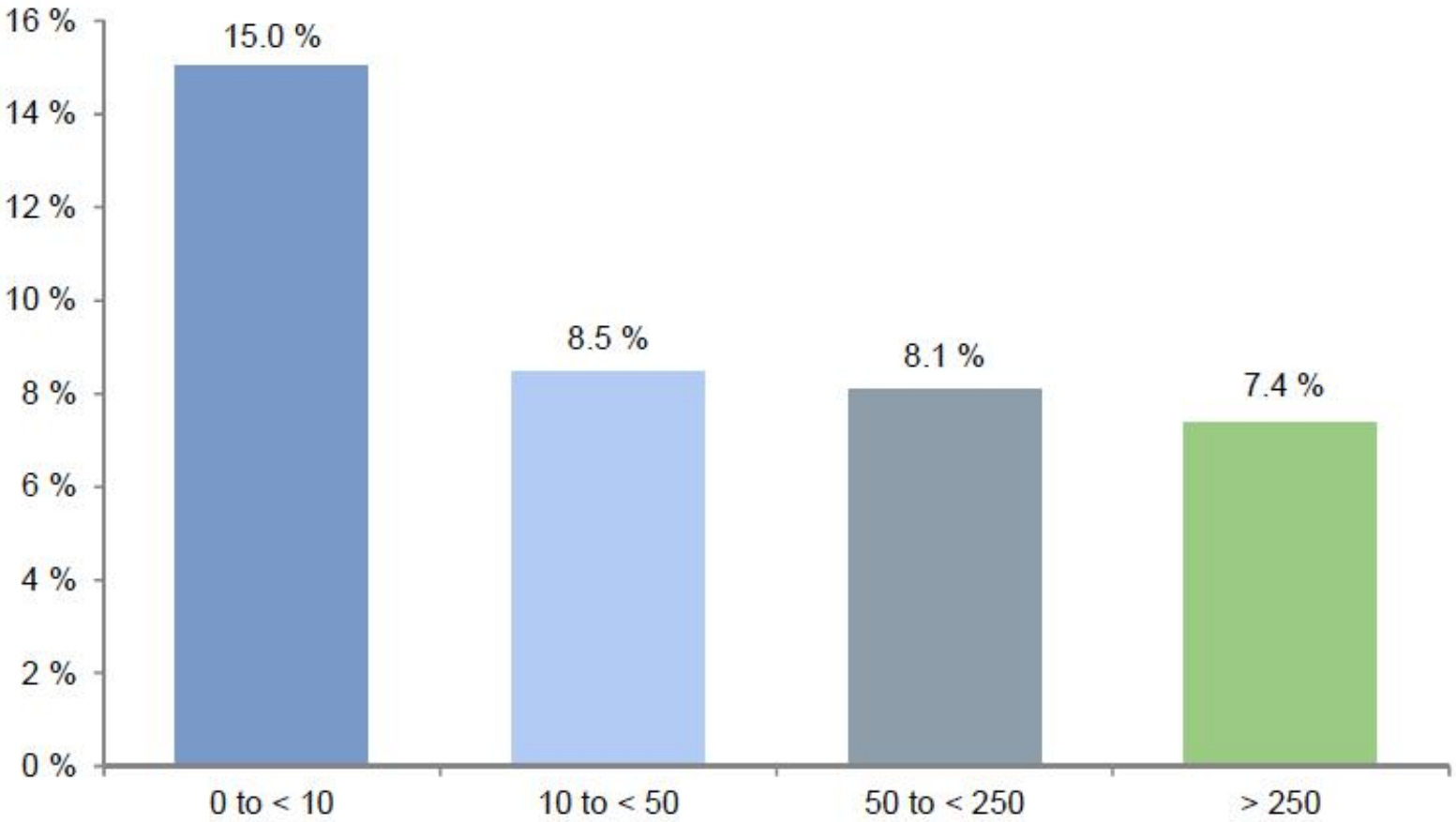


Source: CMET Survey, 2013

Investments of Italian firms by type

	Micro enterprises (1 to 9)	Small enterprises (10 to 49)	Medium enterprises (50 to 249)	Large enterprises (≥ 250)
Industry				
Land and buildings	5.7 %	9.4 %	14.3 %	11.8 %
Machinery	82.4 %	84.9%	85.8 %	87.9 %
ICT technologies	10.9 %	18.9 %	24.9 %	25.1 %
Patents	0.6 %	1.5 %	2.6 %	4.6 %
Employee education	2.5 %	10.0 %	10.8 %	23.1 %
Energy saving investments	2.9 %	9.7 %	7.4 %	17.1 %
Marketing and advertising	2.2 %	5.7 %	7.0 %	14.2 %
Production services				
Land and buildings	5.8 %	5.3 %	9.5 %	8.0 %
Machinery	54.3 %	63.1 %	62.4 %	66.3 %
ICT technologies	45.0 %	32.1 %	32.8 %	46.0 %
Patents	0.9 %	1.3 %	1.0 %	4.9 %
Employee education	3.1 %	10.6 %	13.1 %	21.6 %
Energy saving investments	0.9 %	3.3 %	3.8 %	7.1 %
Marketing and advertising	3.4 %	2.4 %	3.1 %	3.4 %

Italy: R&S intensity by firm's dimension



Source_ MET Survey 2013

Italy: national policies for SME's

Sme occur 5 times into the official document "Italy's Strategy for Reforms", Italian Ministry of Economy and Finance

- (**Main structural reform underway**) Investment framework: alternative financing especially for SMEs …
- (**Credit**) Strengthening of Central Guarantee Fund for SMEs (Draft Stability Law 2016).
- (**Finance for Growth**) The new 'Sabatini Law' offers financing to SMEs for investment in new equipment (min €20,000 max €2m, for 5 years). Fully booked the first fund endowed with €2,5b. A new €2,5b plafond has been established, so to cover investments on capital goods, as well as investments in hardware,software and digital technology

… (national policies)

4 (**Incentives for doing business**) Long-term secured loans granted to entrepreneurs under the age of 40 or to new SMEs with young stakeholders investing in manufacturing or farming, trade and tourism (up to 75% of investment costs). Available funds: €150m.

5 (**Incentives for doing business**) Fully operational the voucher for internationalisation of SMEs. It aims at supporting firms and business networks in their strategy to access foreign markets through the assistance of a temporary export manager.

In addition national institutions: ICE, SACE, …..

SMEs and Industrial Districts

- Most SME's in Italy are grouped in districts, clusters, networks
- Relevance of local business environment for SMEs
- Asymmetries in Regional Development
- Regional Level of Government: Regional laws to define and support SMEs cluster
- Aggregation issue: **firm network**, also at national level
- From local system of production to **local systems of innovation**
- **Also networks at national level based on regional smart specialization**
- **… to catch-up Industry 4.0**


I DISTRETTI INDUSTRIALI IN ITALIA
INDUSTRIAL DISTRICTS IN ITALY
Alimentari / Food Industries
Carta / Paper
Plastica, Gomma / Plastics, Rubbers
Meccanica / Mechanics
Oreficeria / Jewellery
Pelli, Calzature / Leather, Shoes
Prodotti per la casa / Fornitures
Tessile, Abbigliamento / Textiles, Clothing
Club dei Distretti Industriali

Third Italy and Industrial Districts

- Territorial Diversity in Development: Bagnasco (1977), La terza Italia
- Alfred Marshall (1842-1924) and the analysis of UK industrial district in XIX Century

Marshallian **Externalities** or Economies of:

- Specialization
- Information
- (cumulative) knowledge

Firms in Italian District: Keys for International Competition

- Attractiveness of Made-in-Italy Products
- Quality superior to international competitors
- Attractiveness of brand
- Foreign customers fidelity

Source: Osservatorio Nazionale Distretti Industriali, IGT 2016

A historical analysis

Localization and aggregation of SMEs

Becattini, Brusco, Porter, Krugman, Signorini

Production fragmentation

Arndt-Kierzkowsky, Zysman-Schwartz

Globalization through international trade

Feenstra, Hummels-Rapoport-Yi)

Global Value Chain e Governance o complex supply chains

Gereffi-Humphrey-Sturgeon)

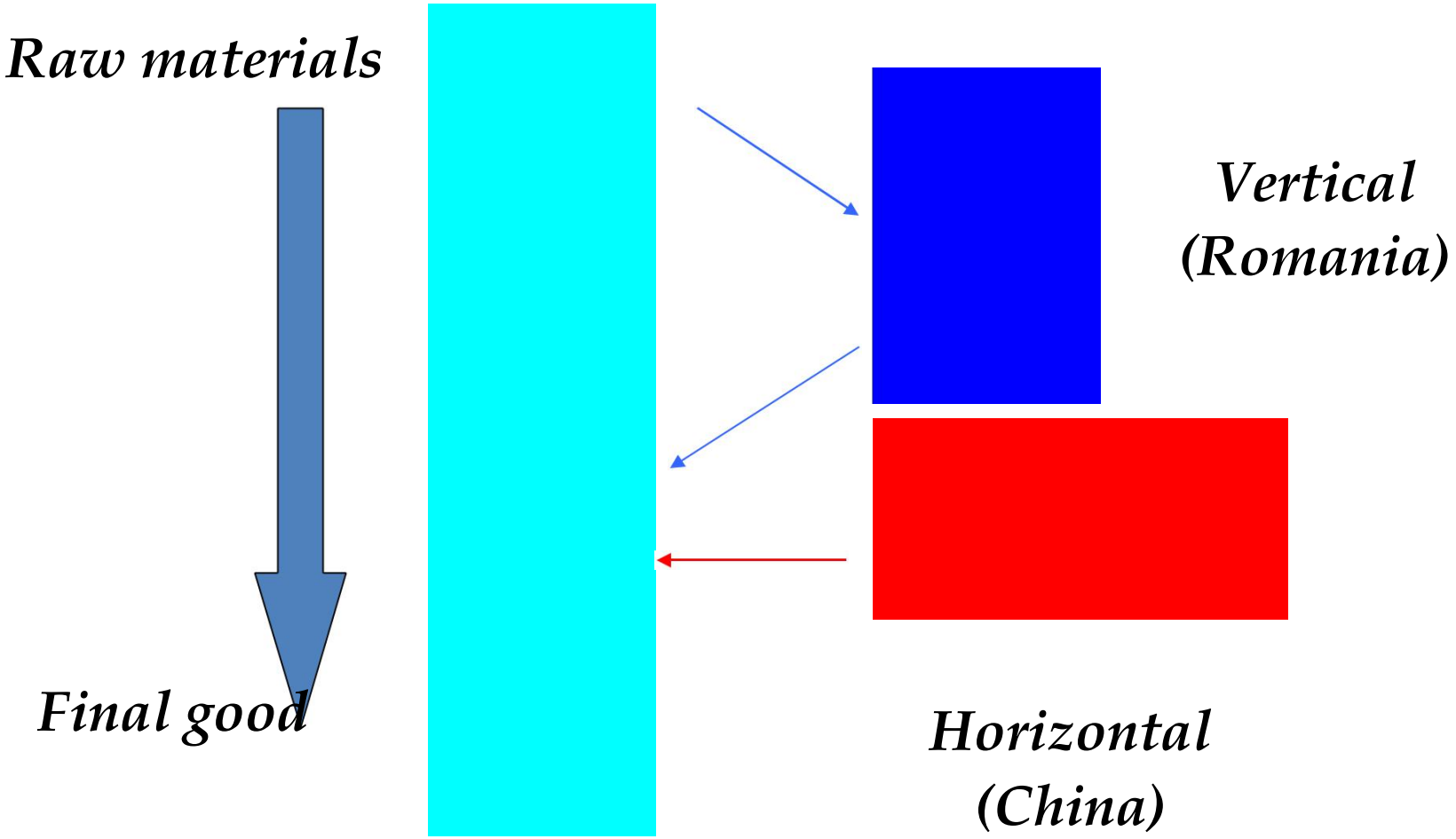
Drivers of change

Delocalization by industrial districts represents an international extension of local value chains

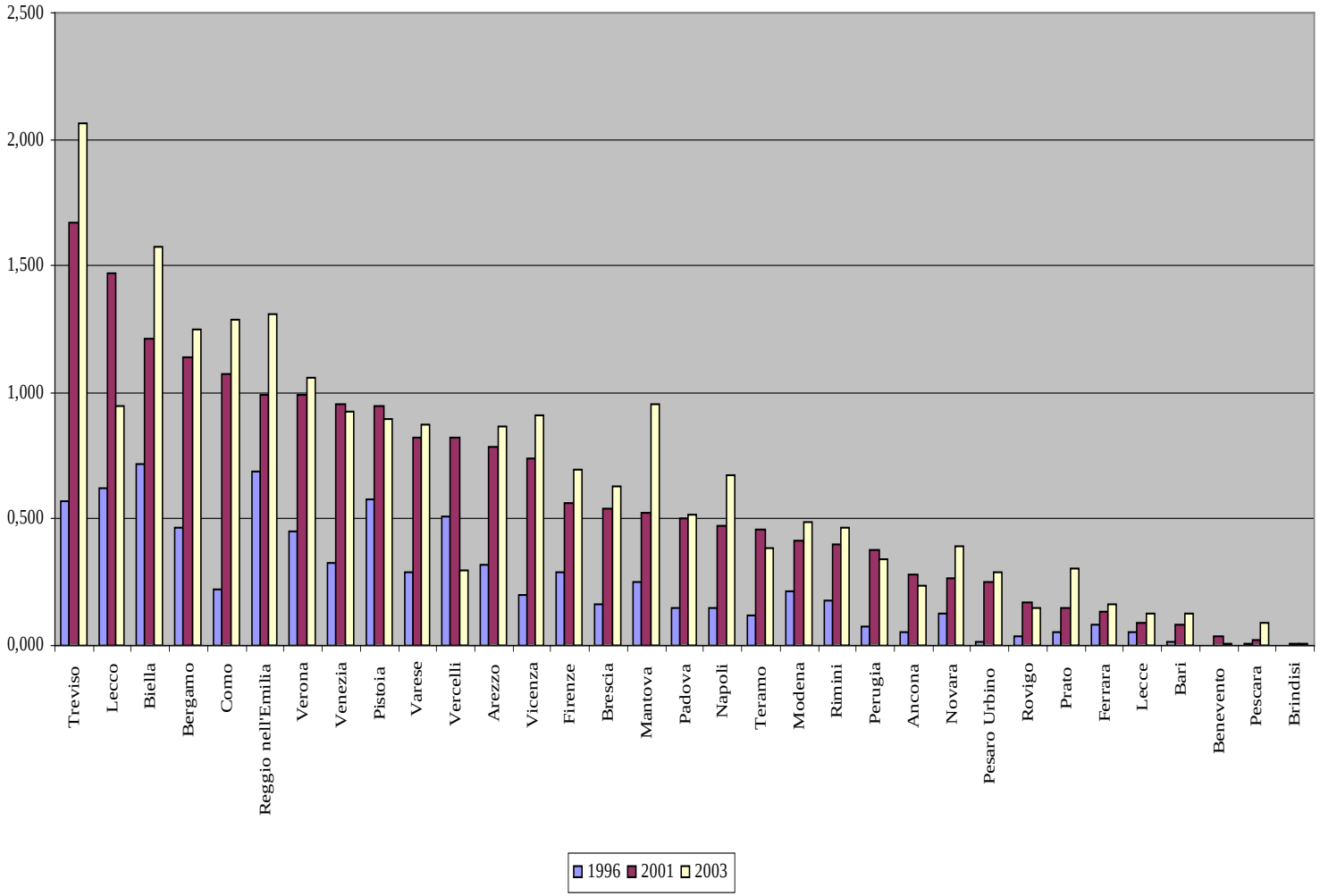
Fragmentation: from local to international

Value chains: from local to global GLOCAL

International Integration of Production
Intra-industry Trade for SMEs



Italian Local Heterogeneity in Internationalization (T&C)



Local and Global Value Chains

International openness (Trade, production, coproduction)

Upgrading Processes (product, process, function, chain)

- Quality and Innovation
- Vertical specialization and new functions:
- Design
- Logistics
- Knowledge Intensive Services (KIBSFinance
- Finance
- Backward and Forward linkages
- New Sectors: Welfare & wellness

Governance of new organizational models

Captive

Vertical integration wirh CEEC Countries

Market

Horizontal integration with Far East)

Modular

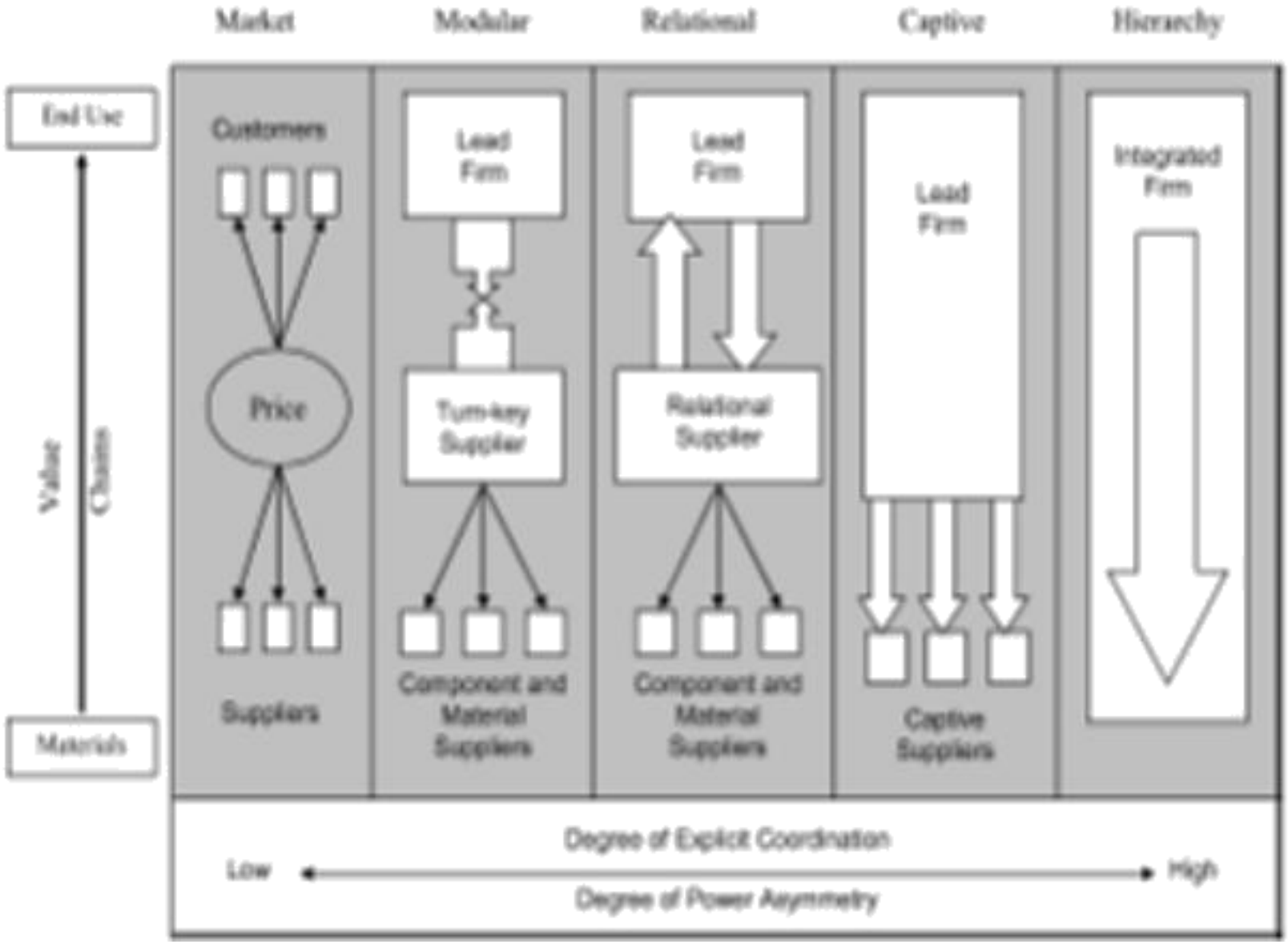
Technologies

Hierarchy

MNEs

Relazionale

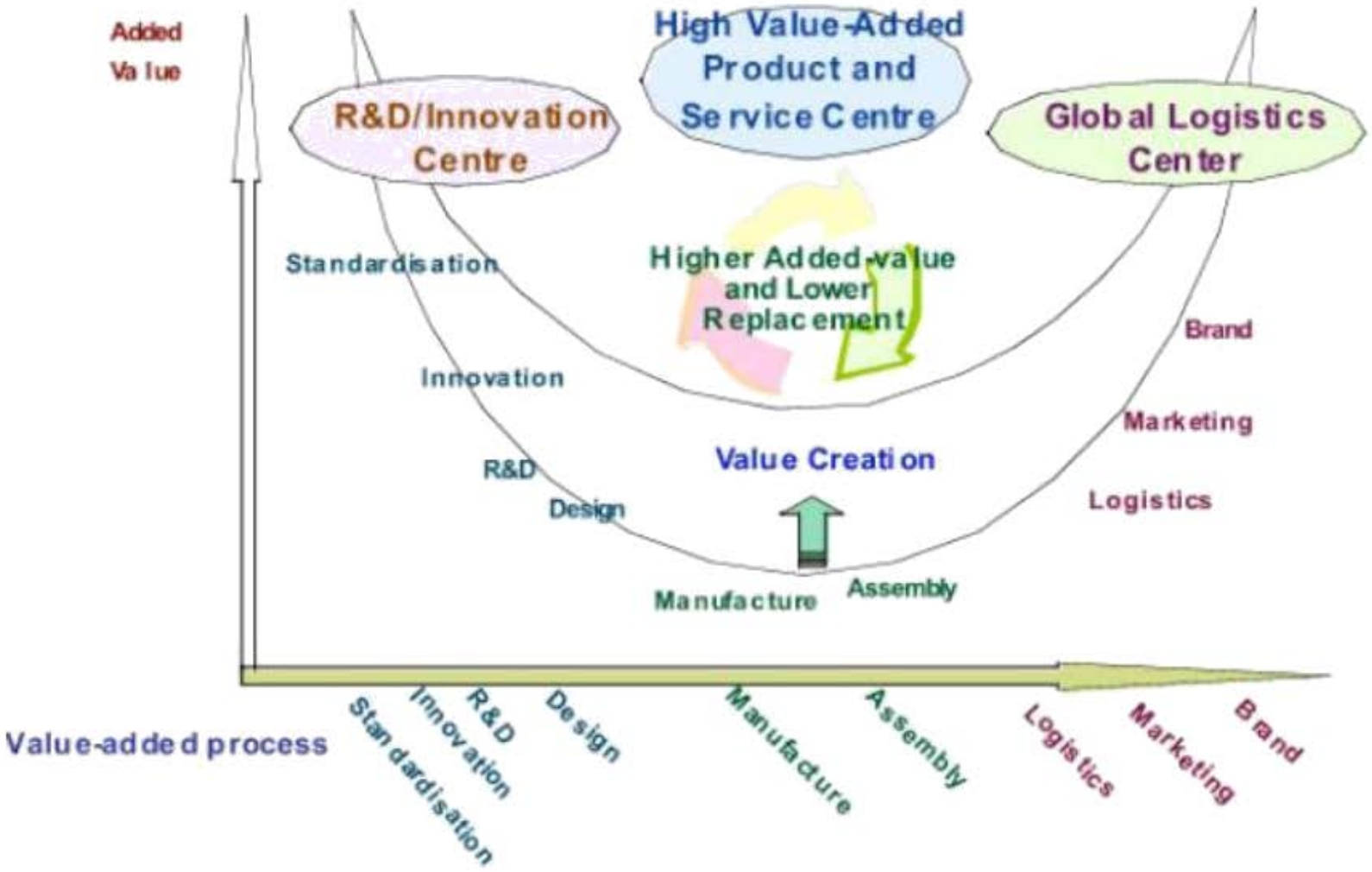
Institutions, partnerships


Market
Modular
Relational
Captive
Hierarchy
End Use
Value Chains
Materials
Customers
Price
Suppliers
Lead Firm
Turn-key Supplier
Component and Material Suppliers
Lead Firm
Relational Supplier
Component and Material Suppliers
Lead Firm
Captive Suppliers
Integrated Firm
Degree of Explicit Coordination
Low
High
Degree of Power Asymmetry

Effects on local system of internationalization (of production) and innovation

- Employment
- Skills
- Productivity
- (international) technology transfer
- Quality
- Investments (inward and outward)

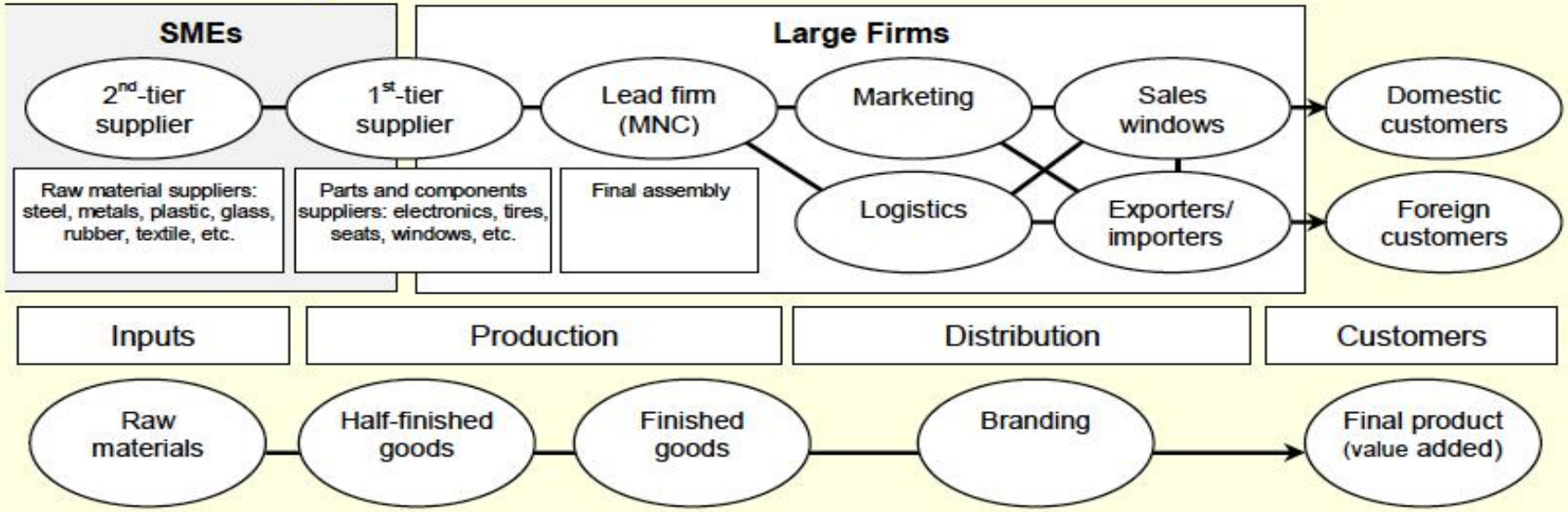
"Smiley Face": conceptual model of the shift to a high value added, globally integrated, services economy



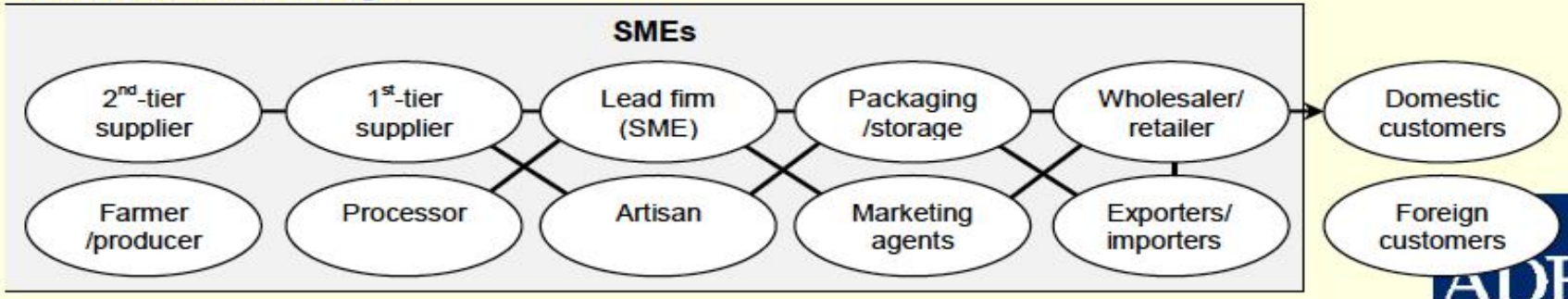
Taken from: Shigehiro Shinozaki, Integrating SMEs into Global Value Chains: Findings from ADB Surveys

Vertical and Horizontal Firm Linkage

Vertical Firm Linkage



Horizontal Firm Linkage



Source: Author's compilation.

The value-relevance of the territory – Labour market

Labour market endowment of technical and manufacturing expertise (*skill match for operations activiti*

The human capital present in the local labour market prevents them from making the decision to move the production to more economically convenient areas, according to the balance-sheet argument.

"We find these competencies ready in the market. Fortunately, here [in this area] the orchestra is broader than in other Italian regions and/or in other countries". He continues, "here the walls trickle of electrical engineering" (Mi's HR manager).

"In the territory, you can easily find the technical skills needed in the operations" (Sigma's HR manager).

""Ours is a product, a world that lives in the moment in which the 'Made-in-Italy' is recognised as a synonym of high quality at the global level. The major international players that look for exclusivity, luxury, tailored products have – almost inevitably – come to Italy because here there exists the expertise to create such goods" (Theta's HR manager).

Incoming MNE and local labor market

- MNEs do not locate haphazardly; location decision is a function of cost factors, institutional settings but also the availability of skilled labour
  - **positive externalities from a region's "industrial commons"**
- Literature points to productivity improvements around foreign-owned firms (Lipsey, 2004)
- But less emphasis on knowledge owing from the industrial base to MNEs
- Well-documented impact of MNEs on local labour system:
  - the wage effect and, in particular, the spillover effects
- but the latter studies remain inconclusive (Ebersberger et al., 2011)
  - they fail to link spillovers with the mechanism that diffuses knowledge, or the specific process of accessing knowledge (Tsai, 2001)

Knowledge diffusion

- The main conduit of knowledge diffusion is labor mobility (Malmberg and Power, 2005)
  - Eriksson and Lindgren (2009): the extent of diffusion of knowledge is stronger through labour mobility than economies of co-location, diversity and scale
- Knowldge diffusion and its spatial dimension → clusters (Keilbach, 2012)
- But Malmberg and Power (2005) notes that much of firms' links are extra local
- Concentration of specialised skills inside clusters (Lissoni, 2001). Occupations with similar knowledge tends to agglomerate (Gabe and Abel, 2012)

Aim of the research

The role of MNEs in the Made-in-Italy (MI) labour Network

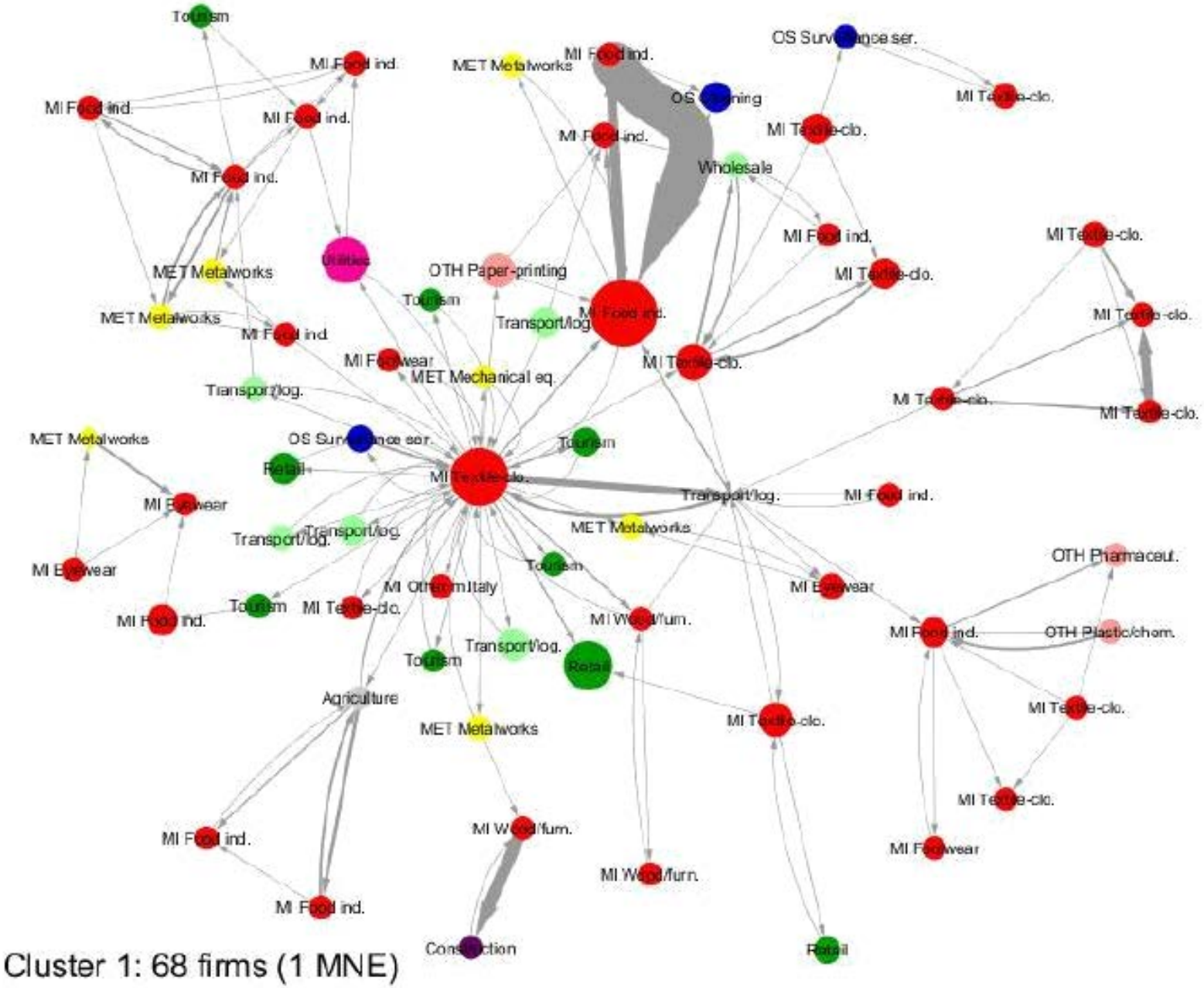
- how they differ from non-MNEs in terms of mobile worker characteristics
- whether they are incubators of “knowledgeable" pool of workers or not,
- whether they locate in strategic labour clusters
- how do network characteristics and MNE presence affect firm performance

MI includes Ceramics, Eyewear, Food ind.,Footwear, Glass,Jewellery, Marble, Other m.Italy, Tanning, Textile-clo., Wood-furn.

Table: Where do mobile workers go? Inter/intra sectoral flows

From various sectors to MI				From MI to various sectors		
W %	Flows	%	Sector	%	Flows	W%
5%	1858	3%	Agriculture	4%	2590	3%
0%	20	0%	Extractive	0%	18	0%
43%	27324	47%	Made in Italy	42%	27324	49%
4%	4479	8%	Engineering	7%	4828	5%
2%	2138	4%	Other industries	4%	2360	2%
0%	169	0%	Utilities	0%	229	0%
5%	1732	3%	Construction	2%	1208	2%
21%	8490	15%	Leisure svs & retail	15%	9646	19%
7%	4536	8%	Logistics & wholesale	8%	4863	6%
0%	149	0%	Financial services	0%	161	0%
3%	1305	2%	Advanced tertiary	2%	1472	2%
5%	3706	6%	Health, edu., pers. svs	11%	7244	8%
4%	1982	3%	Clean., surveill., other	4%	2839	4%
	57888		Total		64782	

Where do different type of mobile workers go?


Tourism
MET Metalworks
Utilities
OTH Paper-printing
Transport/log.
MET Mechanical eq.
Retail
Agriculture
Construction
Wholesale
OTH Pharmaceut.
OTH Plastic/chem.
Cluster 1: 68 firms (1 MNE)


Node Fill Color
ateco2_oss
a- Agricoltura
b- Estrattive
c- Made in Italy
d- Metalmeccanico
e- Altre industrie
f- Utilities
g- Costruzioni
h- Comm.-tempo libero
i- Ingrosso e logistica
l- Servizi finanziari
m- Terziario avanzato
n- Servizi alla persona
o- Altri servizi

Some evidence on SMEs and local labour market

- Clusters are quite heterogeneous in term of sectors
- Hiring from many different firms benefit the firm
- Being within few steps of other firms in terms of worker mobility also benefits the firm
- Firms benefit in terms of increased revenue when they are inside clusters and particularly when such clusters include MNEs
- MNEs tend to improve the quality of local labor clusters
- Policy should aim at encouraging labor mobility and facilitating MNEs

Take away messages

- SMEs are not stand-alone firms
- Small or medium is not a transitory step: it could be the right dimension!
- But only if firm's border are open to collaboration, co-design, co-producing, co-innovation
- Even in the new technology regime (Industry 4.0)
- Where counts: content, reputation, cultural or aesthetical or ethical content, customization, servitization
- Role of industrial commons for
  - Market structure
  - Entrepreneurship
  - tart-ups
  - spin-offs

Thanks for your attention!

For comment or further discussion

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Panel Sessions

Technology, Open Data, Ecosystems and SMEs

Chair: Roberto Santolamazza

CEO, t2i, Treviso

Esa Tikkanen

Ministry of Employment and the Economy, Helsinki, Finland

Dr. Anilkumar D. Dave

Head of Unit, Innovation and Technology Transfer, t2i, Treviso

From Technology eco-system to innovation eco-system

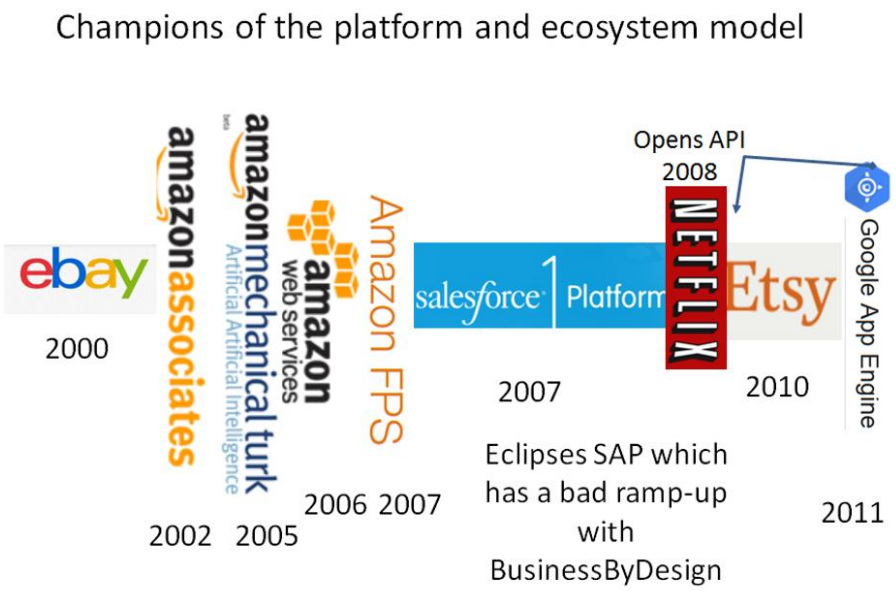
by Sudip Roy

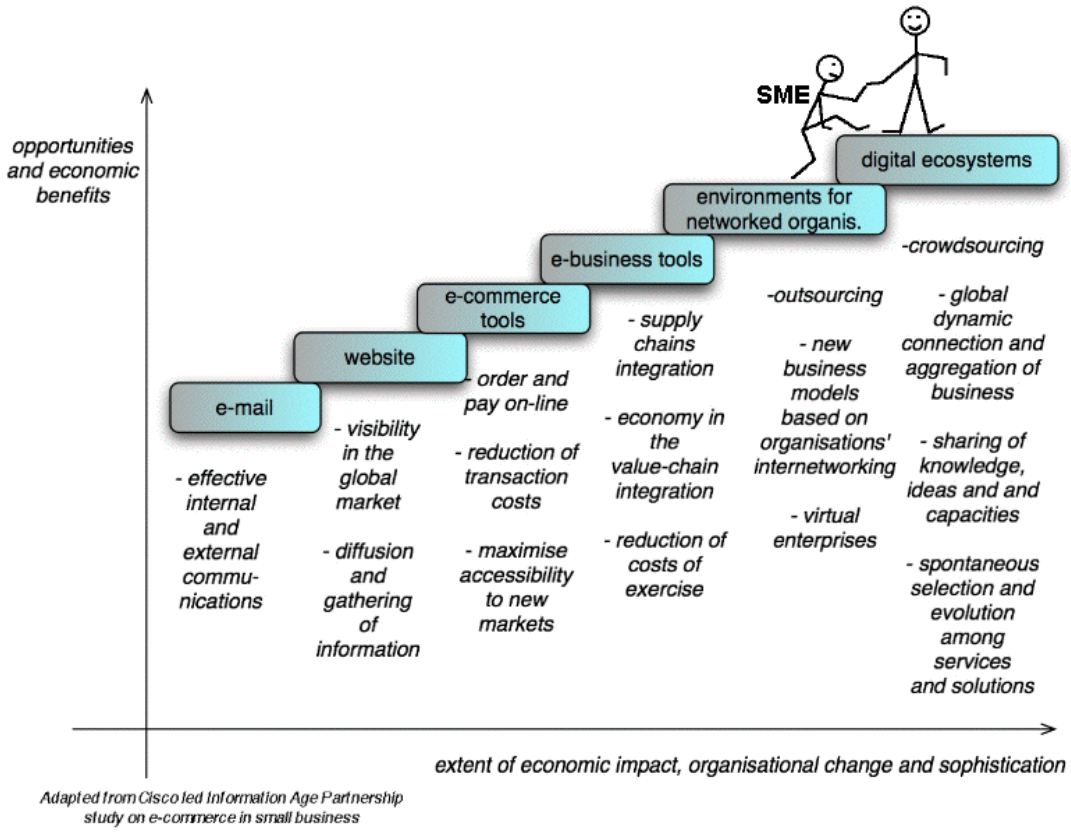
Companies across industries are identifying new opportunities to gain competitive advantage by creating compelling experiences for their customers. One change in business strategy enabling these improved customer experiences is to leverage platforms combining capabilities from multiple players in an ecosystem model. Successful platforms generate incremental value as each new user and each new service is introduced into the platform.

This ecosystem approach to generating new experiences has applicability in many industries. We see the future of financial services moving from the boundaries of the branch networks and call centers to a new world where services are integrated into the point of need for customers as they live their daily lives. The same can be true for health care as the industry focuses on preventative medicine, healthy living choices, and proactive care for those patients most at risk of various disease patterns. The ecosystem approach is already well documented by technology companies such as Amazon and its network of small to medium business partners leveraging the platform to deliver products. We see the same approach as Uber partners with others to provide delivery of food, seasonal products such as flu vaccines and a variety of point of need products which can leverage their incremental distribution economics.

In a startup scenario have you considered who will develop and own the platforms impacting your industry and how your company will be positioned to participate? Will your industry be disrupted as customers adopt a new platform from an adjacent industry?

Companies at the front edge of the digital services wave are designing and optimizing platform ecosystems designed to scale exponentially and drive an economic shift from supply-side to demand-side economies of scale. Using the demand-side model, these companies can create value by tapping into resources and capacity that they don't have to own.





Almost all SMEs use the Internet for business purposes, but intensity varies with increasing size. The most common use of the internet is emailing customers; the use of e- commerce is increasing, but is much less prevalent: only 20 per cent of turnover derived from this source in 2013, and only 22 per cent of businesses made e-commerce sales.

A quarter of SMEs report that they do not possess basic digital skills; there is a positive link between digital skill levels and turnover growth. There is an attitudinal barrier amongst a

minority of SMEs towards developing an online presence, a lack of awareness about the benefits and opportunities available, and a lack of understanding about online security threats.

To make digital a success for the SMEs and the startup sector we need to bring together an innovation eco-system to make the best use of available technology platforms.

I intend to explore this further at the discussion and understand the views of the various members of the panel on the need to move to an innovation eco-system as compared to a technology eco-system.

Entrepreurial Ecosystem, Open Data, and Experts Teamwork as Finnish excamples

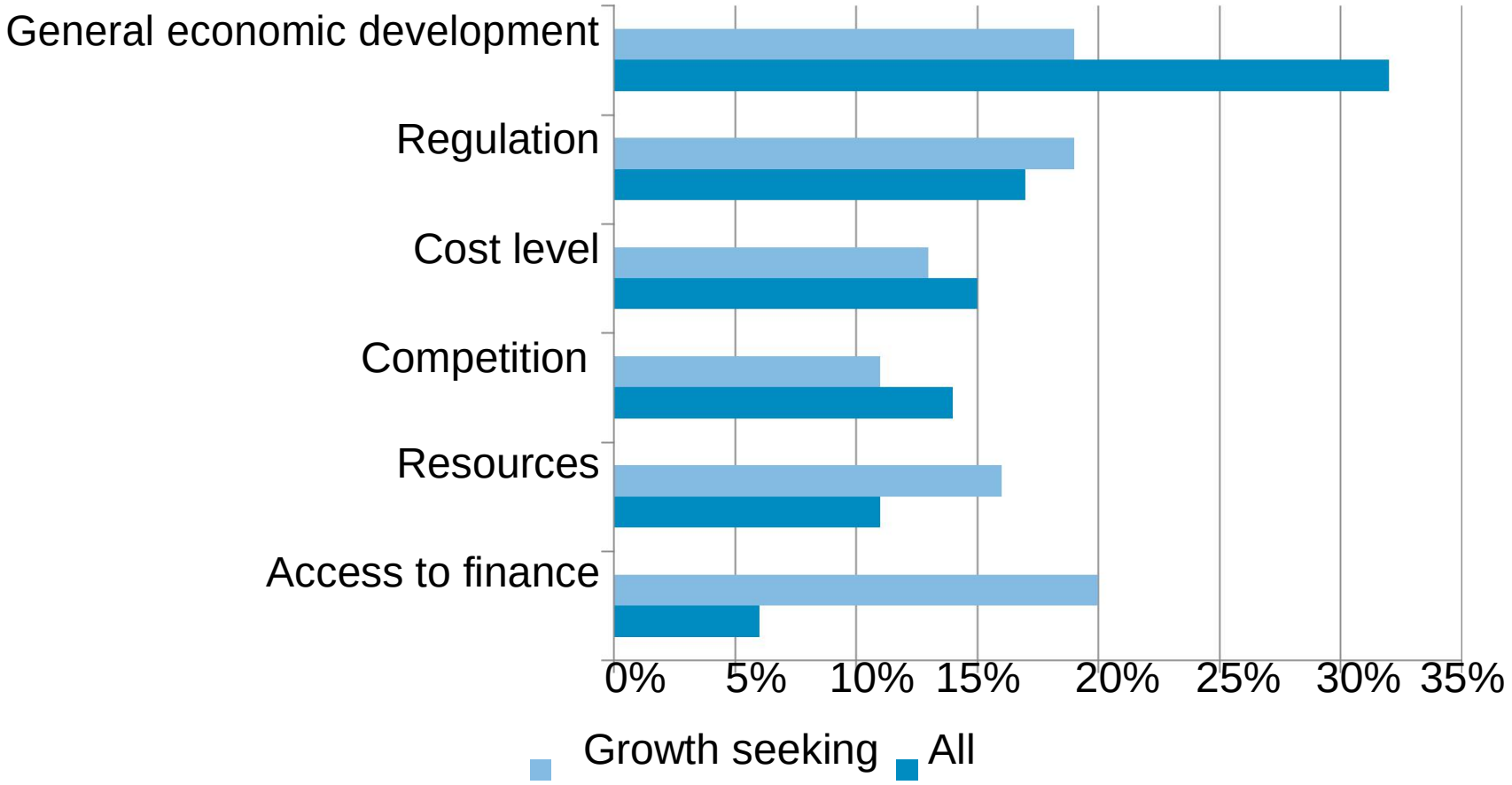
International Entrepreneurship Forum

Venice 14-16.12.2016

Esa Tikkanen

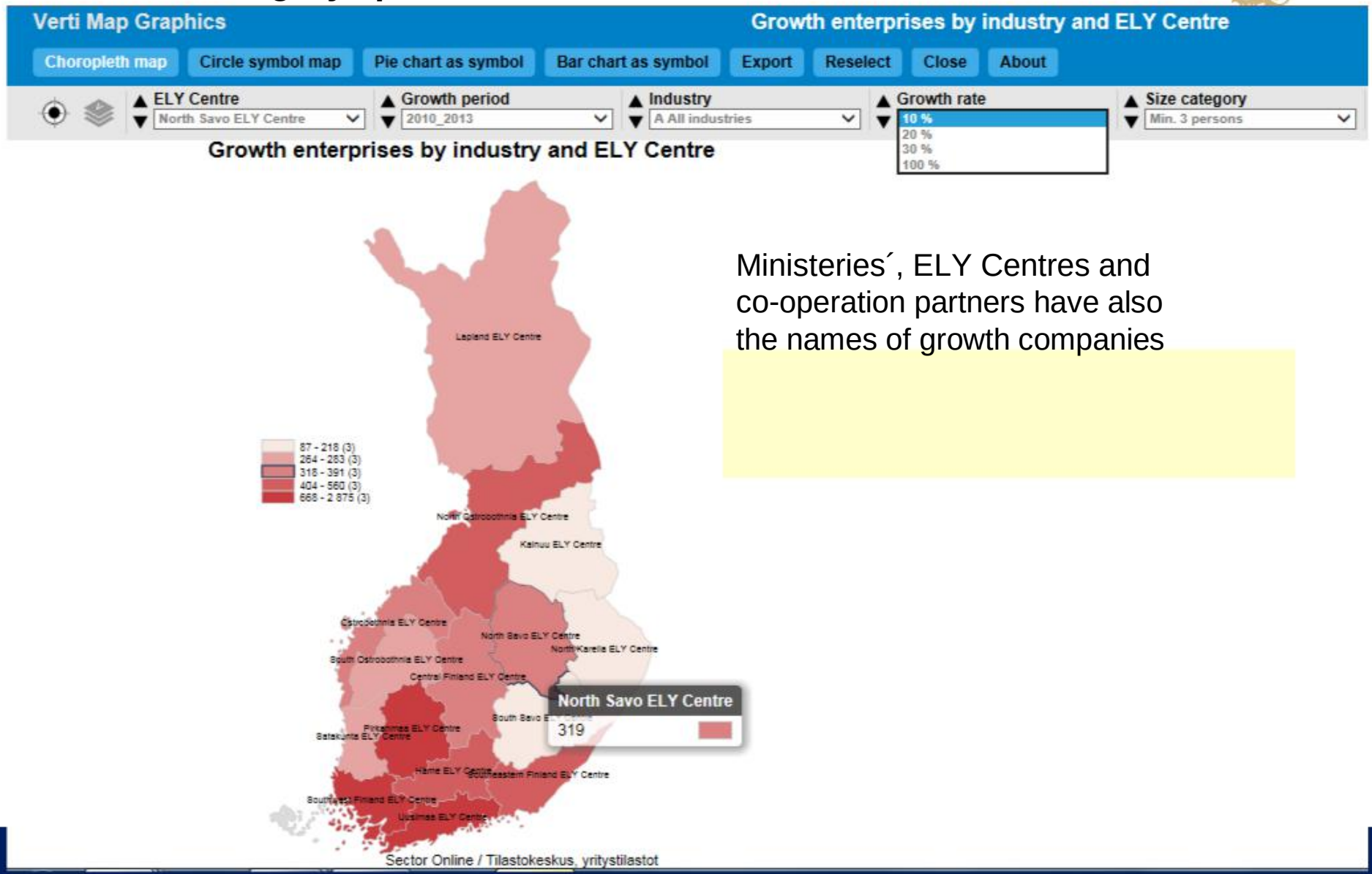
Ministry of Economic Affairs
and Employment of Finland

Main obstacles for enterprises / SME



Map graphic is useful to analyze regional data

- growthrate / 10-100 %
- sizecategory / persons / 1-3, 4-10, or more



Ministeries´, ELY Centres and co-operation partners have also the names of growth companies

Usefulness of Open Data as source of market information

- Information on establishment of enterprises freely available

Regional market data on e.g. province, region or municipality

- Together with financial statement data, establishment information is critical during the founding and development stages of an enterprise

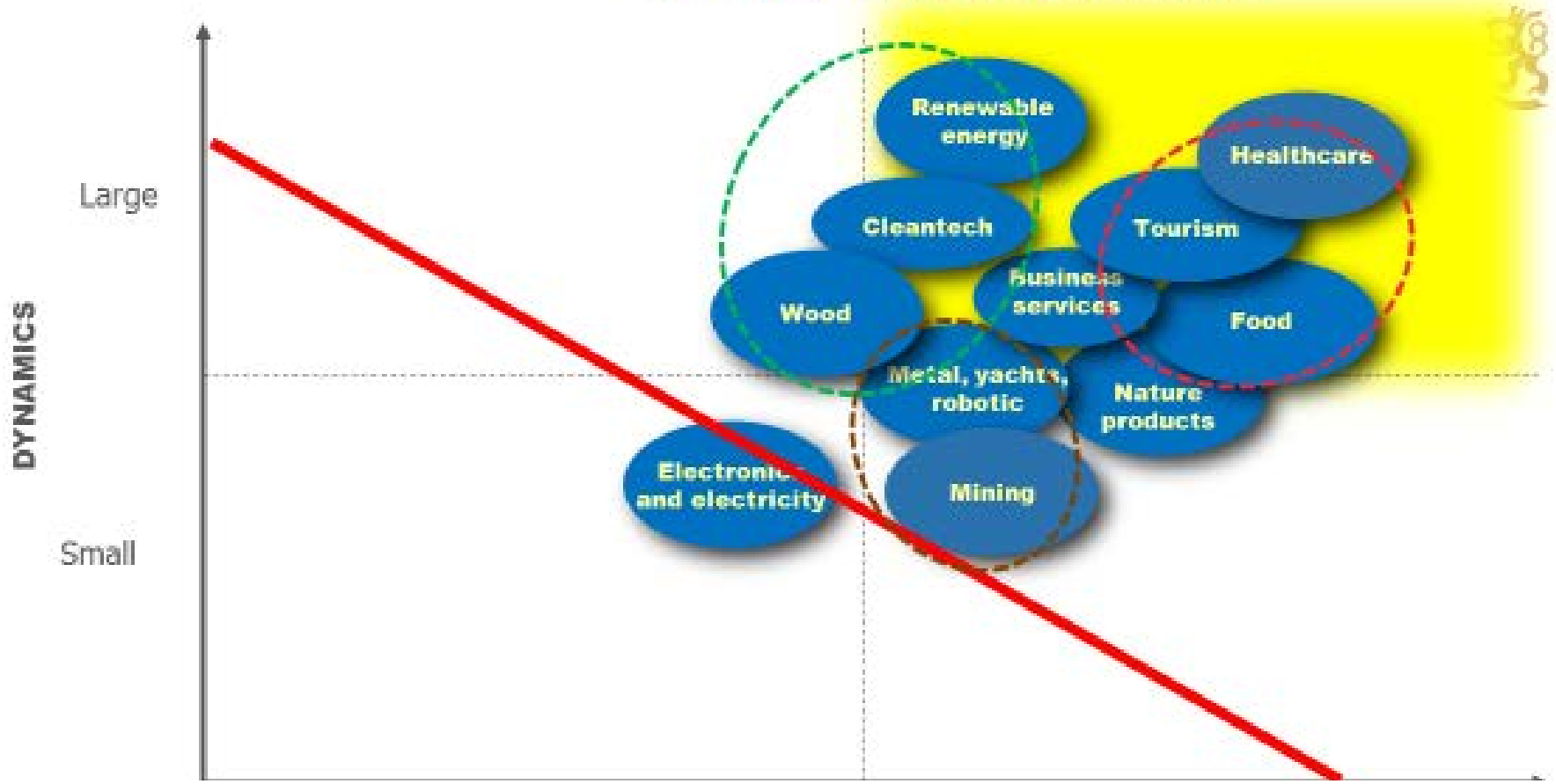
	56102 Cafés		
	Establishments	Turnover/establishment (1000 euros)	Turnover/person (1000 euros)
Whole country	3,830	356	93
Helsinki	487	412	94
Järvenpää	22	410	94
Kerava	24	345	100

Footnote:
Source: Statistics Finland, Register of Enterprises and Establishments
Standard industrial classification TOL 2008

- *The new interface of My Enterprise Finland displays establishment information automatically*
- *Usability of freely available data is very high (average: 4,6)*
- *Enterprises' growth statistics facilitate versatile growth analyses*
- *Map graphics make it easy to understand the situation in different regions*

Selection of growth / business ecosystem

➢ experts co-operation



SECTOR REPORTS

Experts of teamwork

SLUSH –event; a new culture that encourages risk-taking

- for starts-up and growth enterprises

Helsinki 31.11 -1.12.2016

- **17 500 participates**
- **from 120 countries**

You are welcome Helsinki in November 2017!

Turning prospects into success

Thanks

Esa Tikkanen

Development Director

Enterprise and Innovation Department

Business Intelligence / Sector Business Services

mobile +358500405459

esa.tikkanen@tem.fi

Ministry of Economic Affairs
and Employment of Finland

Innovation Intermediaries role (and tools) for innovation eco-systems evolution

Anilkumar D. Dave

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t2i - trasferimento tecnologico e innovazione s.c.a r.l.

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- **Eco-system**
- **New evolution pathways**
- **Intermediaries role and tools**
- **Innovation driven ecosystem profile**

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The Global Innovation Index

JOHNSON
Cornell University

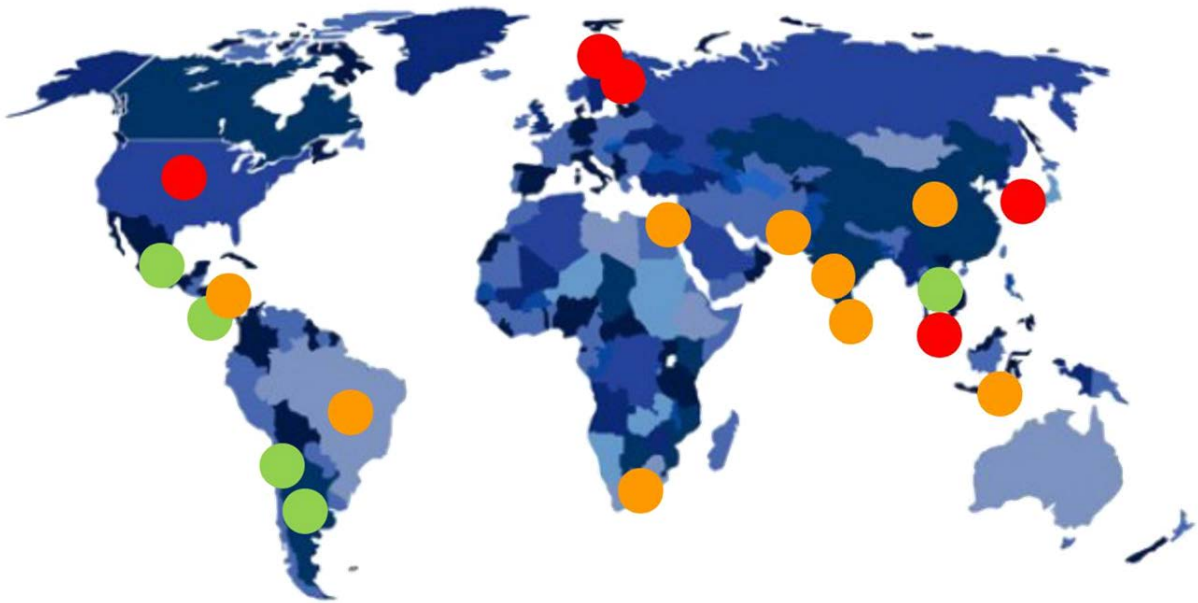
INSEAD
The Business School for the World®

WIPO
WORLD INTELLECTUAL PROPERTY ORGANIZATION

- **"Effective Innovation Policies for Development"**
- **141 economies - 79 indicators**
- **14 middle-income out-performing countries: Republic of Moldova, China, Vietnam, Armenia, Senegal, Mongolia, Malaysia, Montenegro, Ukraine, India, Bulgaria, Thailand, Morocco, Jordan.**
- **8 low-income out-performing countries: Malawi, Mozambique, Rwanda, Kenya, Mali, Burkina Faso, Cambodia and Uganda.**

Anilkumar D. Dave – «Innovation Intermediaries role (and tools) for innovation eco-systems evolution»

- **The countries that rank highest are described as technological leaders: Finland, US, Sweden and Japan, Republic of Korea and Singapore.**
- **The second level of potential leaders in technology includes many developing countries: Malaysia, Mexico, Argentina, Costa Rica and Chile.**
- **The third level, dynamic adopters, includes: Iran, South Africa, Panama, Brazil, China, Egypt, Indonesia, Sri Lanka, India and others.**



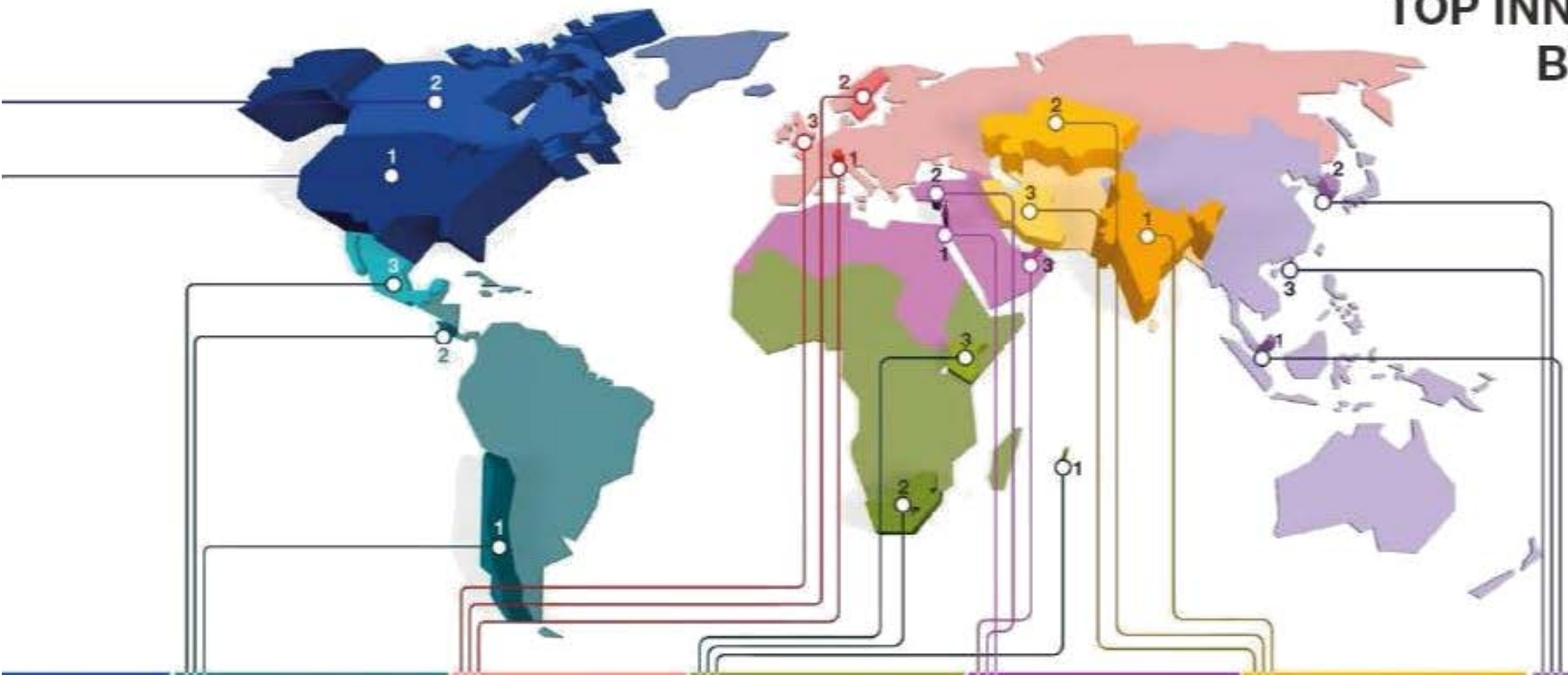
WHO IS LEADING INNOVATION?

THE GLOBAL INNOVATION INDEX 2016

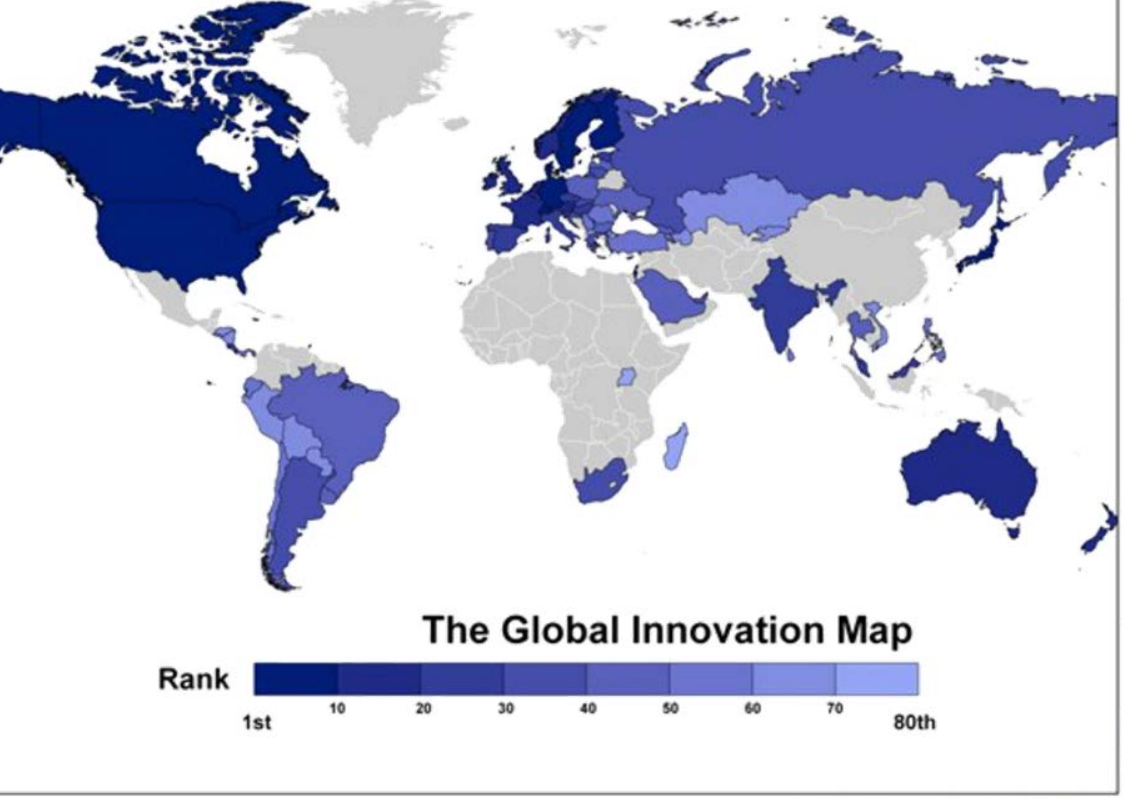
Every year, the Global Innovation Index ranks the innovation performance of nearly 130 countries and economies around the world. Each country is scored according to 82 indicators.

www.globalinnovationindex.org #GII2016

TOP INNOVATORS BY REGION



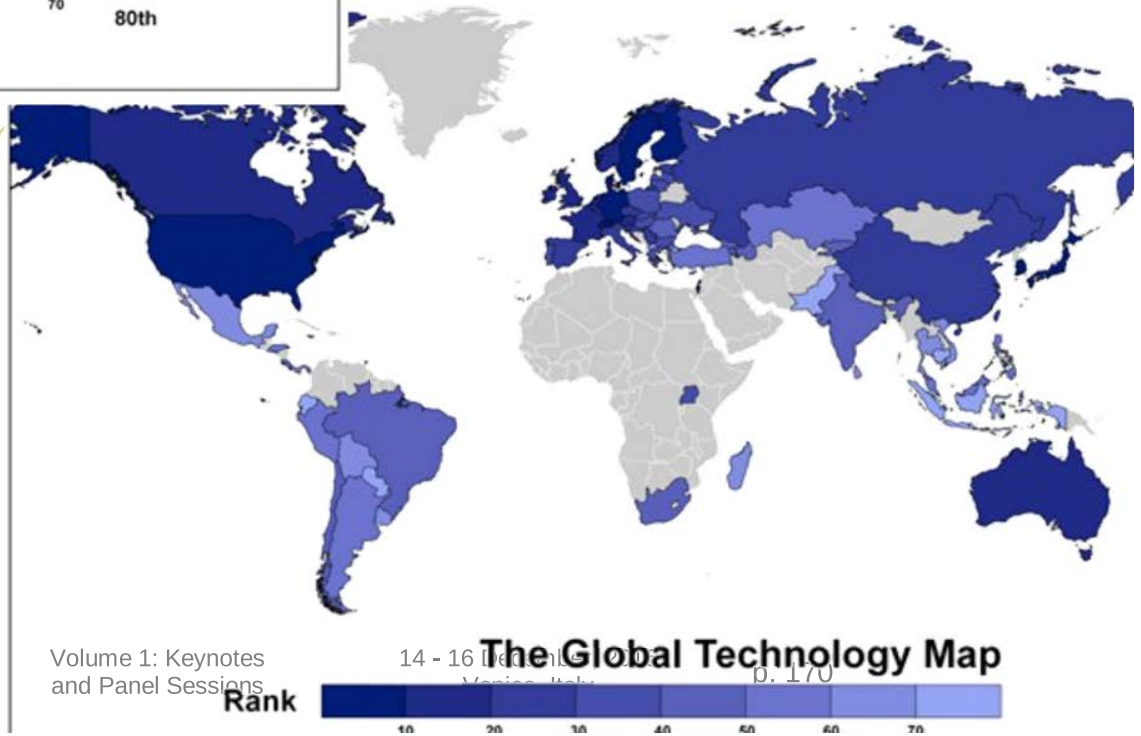
NORTH AMERICA	LATIN AMERICA AND THE CARIBBEAN	EUROPE	SUB-SAHARAN AFRICA	NORTHERN AFRICA AND WESTERN ASIA	CENTRAL AND SOUTHERN ASIA	SOUTH EAST ASIA, EAST ASIA AND OCEANIA
1 UNITED STATES OF AMERICA	1 CHILE	1 SWITZERLAND	1 MAURITIUS	1 ISRAEL	1 INDIA	1 SINGAPORE
2 CANADA	2 COSTA RICA	2 SWEDEN	2 SOUTH AFRICA	2 CYPRUS	2 KAZAKHSTAN	2 KOREA, REP. OF
	3 MEXICO	3 UNITED KINGDOM	3 KENYA	3 UNITED ARAB EMIRATES	3 IRAN	3 HONG KONG (CHINA)



Rotman School of Management
UNIVERSITY OF TORONTO

Martin Prosperity Institute

Credits to http://www.citylab.com/tech/2011/10/worlds-leading-nations-innovation-and-technology/224/



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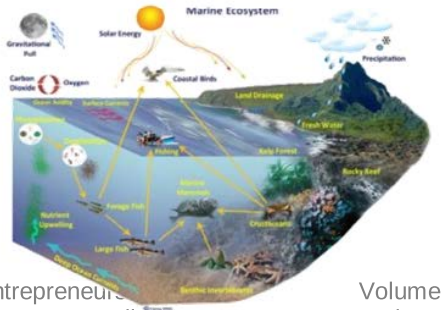
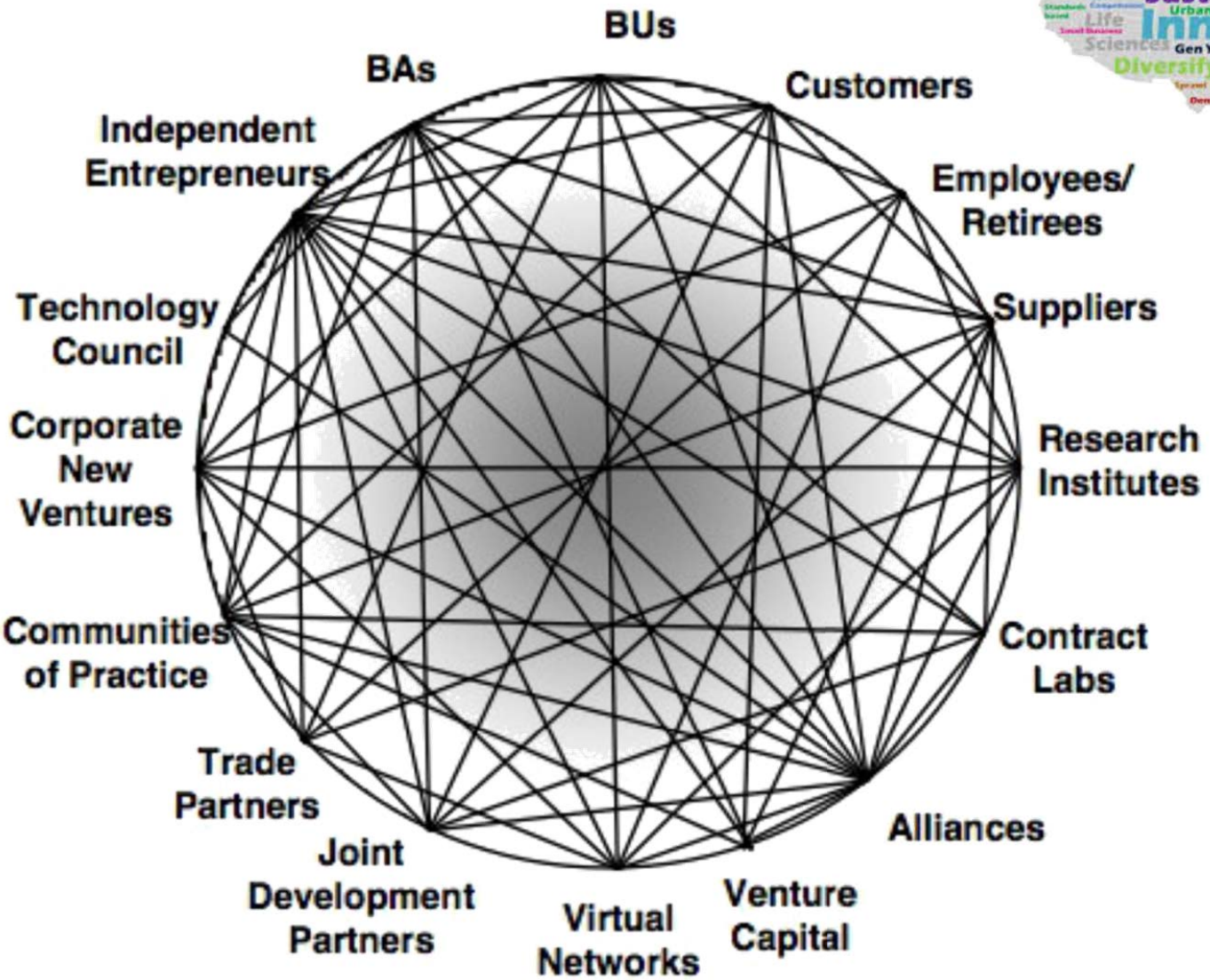
- **The basic unit of study in environmental science is the ecosystem (short for 'ecological system').**
- **An ecosystem consists of a biological community and its physical environment.**
- **An ecosystem can be as small as a drop of water or a puddle, or as large as a forest and vast, such as an ocean**
- **Some ecosystems (such as caves) have clear boundaries, while others (such as forests) do not**
- **An ecosystem provides the organisms that live in it what they need to survive: food (energy), water and shelter**





Anilkumar D. Dave – «Innovation Intermediaries role (and tools) for innovation eco-systems evolution»

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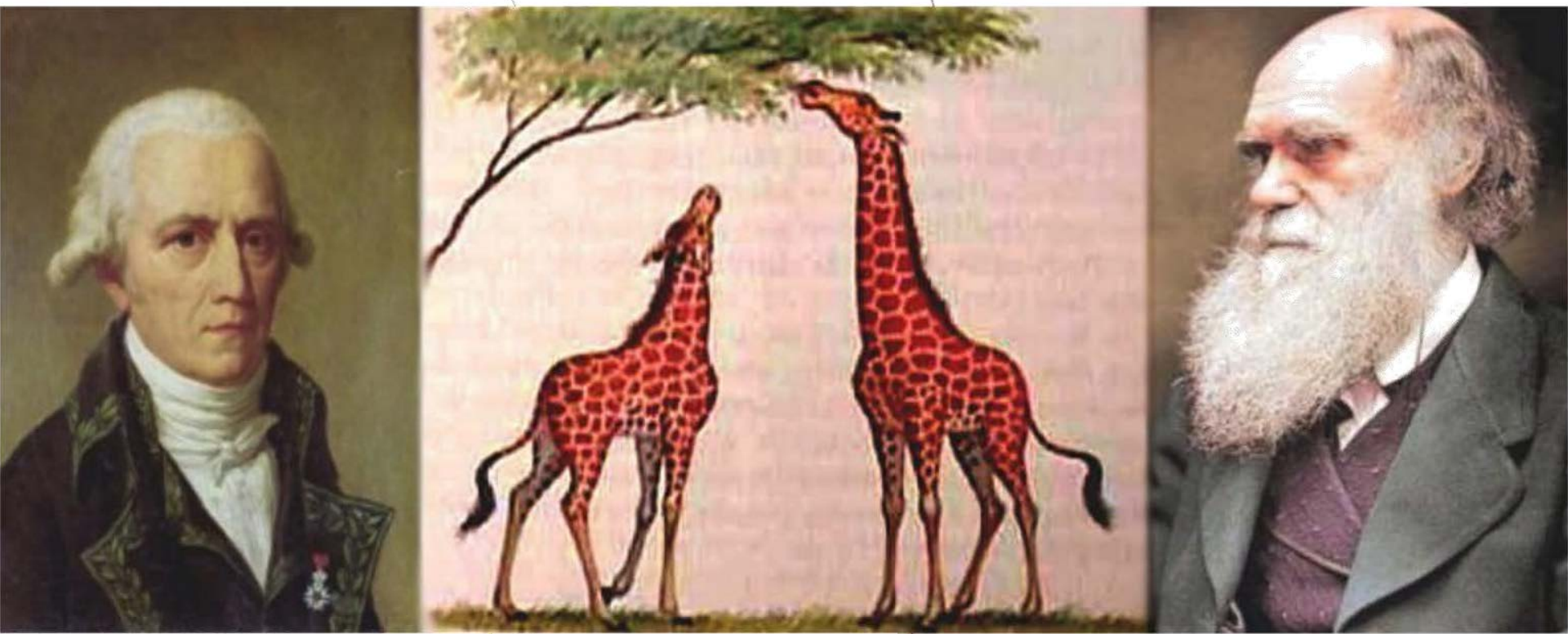
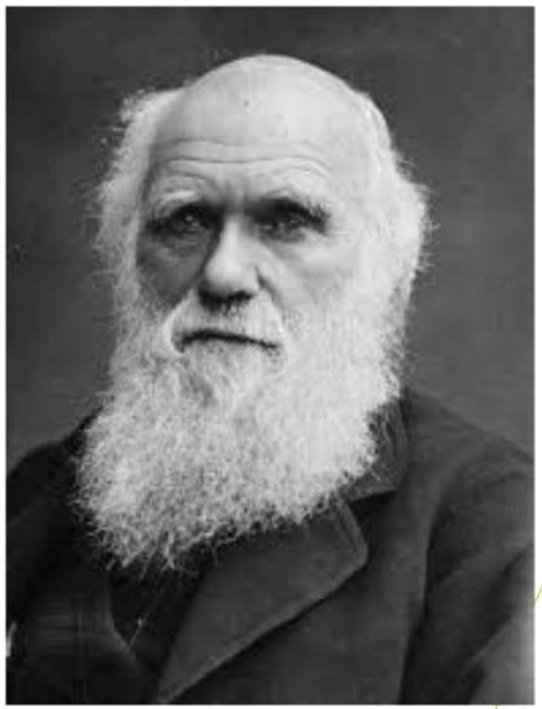
Clash of evolution theories



Anilkumar D. Dave – «Innovation Intermediaries role (and tools) for innovation eco-systems evolution»

Charles Darwin
1809 - 1882



Darwin believed that the desires of animals have nothing to do with how they evolve, and that changes in an organism during its life do not affect the evolution of the species. He said that organisms, even of the same species, are all different and that those which happen to have variations that help them to survive in their environments survive and have more offspring. Other individuals, that are not so well adapted, die off. Most elephants used to have short trunks, but some had longer trunks. When there was no food or water that they could reach with their short trunks, the ones with short trunks died off, and the ones with long trunks survived and reproduced. Eventually, all the elephants had long trunks.

Jean-Baptiste de Lamarck
1744 - 1829

Lamarck is best known for his *Theory of Inheritance of Acquired Characteristics*, first presented in 1801 (Darwin's first book dealing with natural selection was published in 1859): If an organism changes during life in order to adapt to its environment, those changes passed on to its offspring. He said that change is made by what the organisms want or need. For example, Lamarck believed elephants all used to have short trunks. When there was no food or water that they could reach with their short trunks, they stretched their trunks to reach the water and branches, and their offspring inherited long trunks. Lamarck believed that giraffes stretched their necks to reach food and their offspring and later generations inherited the resulting long necks.

Anilkumar Dave

1972 – as late as possible

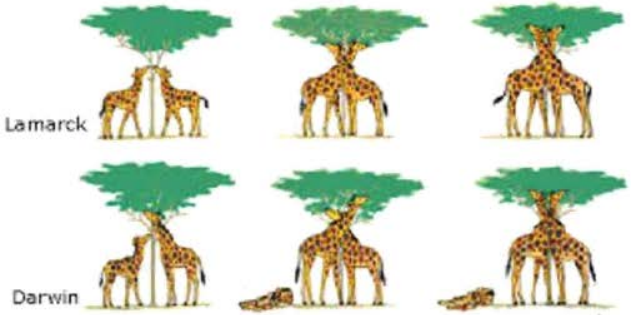
The evolution process is now affecting the ecosystem as a whole and not only the single species or the single elements (ie SMEs, large enterprises, policy makers, government, research organizations, universities, etc).

The new paradigm require more flexibility and adaptability but increases the complexity and ecosystem overall entropy. STRATEGY and ORIENTATION NEEDED.

Species (stakeholders, ecosystem components) are evolving, thus appearing new champions (ie start-ups, smart growing SMEs), new domains (digital economy), new approaches (INCLUSIVE and jugaad innovation), new challenges (SDGs!).

The ecosystem next stage is pushing for collaborative projects (multi-companies, mix-up of large enterprises and SMEs) and new actors (dynamic intermediaries that can offer also solutions and services).

Anilkumar D. Dave – «Innovation Intermediaries role (and tools) for innovation eco-systems evolution»



The ecosystem is evolving.

The innovation driven ecosystem is scaling-up and mixing both the Darwin and the Lamarck theories:

-The environment is now global and the competition very tough: innovation is one of the winning cards

-The genetic mutation of (smart?) SMEs is an evolving continuum but it is clear that the strongest will survive

-The SMEs bunches can survive if they see, as

allies, (and not enemies) the research and technology centres, re-design development policies focusing innovation

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The intermediaries and other stakeholders (ie policy makers and financial organisations) are evolving.

They should act differently:

- **Physical presence (territory)**
- **Involvement and (deep) understanding of ALL the components of the (new) ecosystem**
- **Drive and support policies (common strategy)**
- **Propose direct and on-hand added value services**
- **Skills, competence and 'human touch'**
- **Defeat socio-economic values and competitiveness**
- **Promote new tools and added value services**

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www.openisme.eu

An incoming ‘peculiar’ IT driven added value services ecosystem

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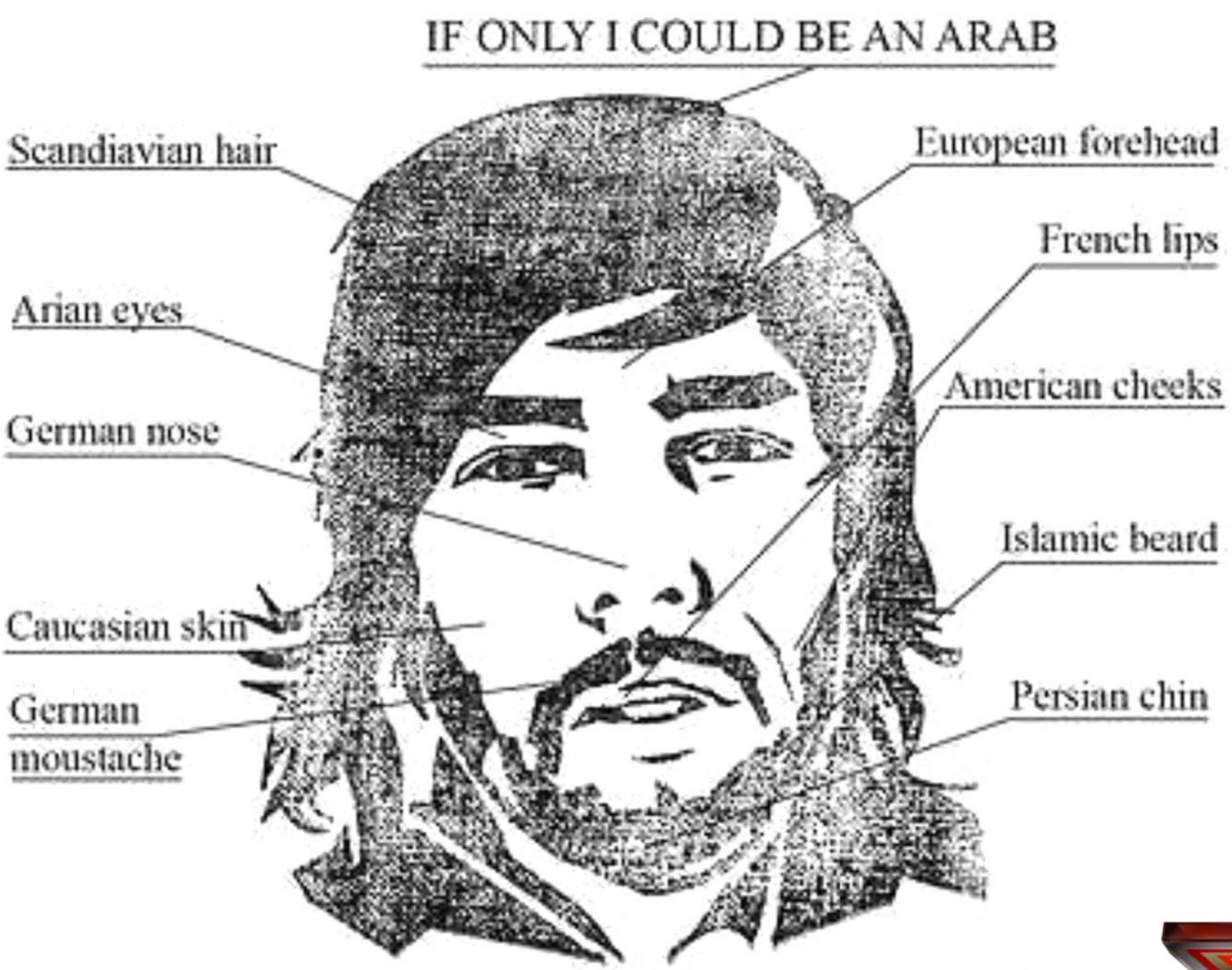
IF ONLY I COULD BE AN ARAB
Scandiavian hair
European forehead
French lips
Arian eyes
American cheeks
German nose
Islamic beard
Caucasian skin
German moustache
Persian chin
- GENETIC GLOBALISATION

The clusters are evolving thus responding to external factors, ie modification of the environment, but it is not clear which are the 'off-springs' that will survive or if the modified factor is going to be maintained.

The "i for innovation" factor (gene) of such advanced ecosystem is represented by the inclusion of new characteristics (maybe deployed by a super partes entity):

-Technology audit (to better understand the requirements)
-Scouting (of solutions and suppliers)
-Analysis of returns, drawbacks, financials and business impact
-Return On Investment vs Return On Technology
-Make the 'last mile' (R&D Technology final product/service) real!

It is naturally evident how the main role is assumed by Intermediaries (western countries) and/or policies makers (Asia), a combination of those would be the best alchemy


THE LORD OF THE RINGS

THANK YOU!!!

Innovation Intermediaries role (and tools) for innovation eco-systems evolution

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t2i - trasferimento tecnologico e innovazione s.c.a r.l.

Impact Investment for Start-Ups and Growth, Social Responsibility and Social Entrepreneurship

Chair: Candace Johnson
European Business Angel Network

Mandisa Tshikwatamba
CEO, Small Enterprise Development Agency - SEDA, Pretoria, South Africa

Lusapho Njenge
Chief Strategy and Information Officer,
Small Enterprise Development Agency - SEDA, Pretoria, South Africa

Dr. Pham Vu Thang
National University of Vietnam, Vietnam

Andrea Di Anselmo
Vice-President and Founding Member, META Group D.o.o., Terni
& Vice-President, INSME, Rome

1. What Impact?

The need for investment to travel a mile further than the economic impact landmark, has generated considerable interest in and consideration of the value of social impact. This relatively new objective of investment stems in part from a realization of the limitations of economic value creation. Growing income and wealth inequalities both among and within nations, together with rising levels of environmental degradation, have led to a reconsideration of the:

- The nature and scope of investment projects,
- The duality of economic and social objectives having equal or distributed value within investment projects;
- The creation of usable metrics to measure both economic and social outcome of investment projects; and
- An enhanced realization of the common good that can be created through a meaningful attention to such impact in the performance of different projects.

According to IRIS Research impact tends to cover both "social" and "environmental" objectives. In other words what is measured can be either or both social and environmental outcomes alongside pure economic ones. Typical examples include:

> "*SOCIAL OBJECTIVES The lack of low-income housing in Pakistan leads to social problems including homelessness and unsafe slums. To address this gap, "PML Housing, Ltd." develops affordable housing units and provides livelihood assistance to residents.*
>
> *ENVIRONMENTAL OBJECTIVES "No H20 Auto Wash" is a franchise of car washes that uses an innovative technology to wash cars without using water. The goal of the enterprise is to improve the environmental footprint of the car wash industry.*

SOCIAL AND ENVIRONMENTAL OBJECTIVES "SunStarTec" is a solar energy company operating in developing countries. It aims to develop environmentally-friendly renewable energy solutions that provide access to electricity for rural communities"

Source: IRIS, 2015

Social impact objectives can include a rich variety ranging from income and productivity growth, agricultural productivity, capacity building, community development, affordable housing, employment creation, access to energy, education and clean water, and many other causes. While environmental impact' tends to address sustainability and efficiency uses of land and energy, water management, bio-diversity conservation and prevention of accidents and health hazards, to name a few.

The selection of objectives can be influenced by the local and regional factors affecting the impact that an organization intends to make. Equally, the prospects of growth opportunities in specific sectors may skew impact investment in certain sectors in particular countries. Organizations with a strong environmental focus are more likely to develop production/manufacturing operational models, while services-related models tend to be the norm for socially focused organizations

The application of the principles of SDGs (Sustainable Development Goals) adds another layer of complexity to the debate in that with their adoption we are mindful of making and sharing impact value across the globe.

Discussion Point (1)

Do local and regional factors affect decision makers when considering what type of impact investors wish to make? Also, do certain industry sectors benefit more from a focus on social and environmental impact?

Do the SDGs make a difference to how we examine impact?

---

2. Inclusivity

Incorporating social and environmental impact objectives can contribute to 'inclusive growth' opportunities. Initiatives aimed at serving the welfare of disadvantaged or lower-income groups can lead to the modification of technologies, services and products to better meet the needs of these communities. The larger the segment of these communities that are reached by inclusive strategies, the greater is the impact that flows from their adoption (OECD, 2015). Where human capital and knowledge is deficient, or where infrastructure is poor, the challenges to making an impact multiply. Innovative approaches, including the use of information and communication technologies can make a difference. Examples include the: Hridulaya Cardiac Care Centre which provides heart surgery at a much lower price using state of the art technologies but efficiency-based, no-frills management practice.

Discussion Point (2)

How can investors and organisations incorporate inclusive innovation strategies to make higher levels of economic, social and environmental impact?

---

3. Context and Conditions

Discussions and debates on impact are sometimes torn between the proportionate importance that can or should be attached to economic and social value or gain given any single investment project. This is a perennial issue of interest to investors, researchers and beneficiaries. We do not really have any consensus on these issues with some arguing that investors should sacrifice financial return so that

social impact can be maximized, while others argue that it is important to understand that there is a strong positive correlation between financial returns and social impact. The proponents of the former view point to the drift (from social impact) that occurs when businesses focus on profit maximization, while the latter group put forward the argument that by maximizing profitability, generating a healthy cash flow, encouraging growth and obtaining easier access to capital markets you are more likely to make tangible impact. In other words the trade-offs between profit maximization and maximizing social impact continues unabated!

Both the Omidyar Network and academic researchers will suggest that it depends on a whole range of factors. In fact, the trade-offs debate can be an unproductive. It may be better to focus attention on more pertinent and relevant questions (Bannick et al, 2016).

The trade-off debate also misses out on a more fundamental issue affecting any kind of investment, and that is one relating to entrepreneurial outcomes. In other words the nature of any impact – social or environmental – has to reflect on whether the impact is a one-off or is it something that generates new or spin-off opportunities. Does impact act like a platform of possibilities in the same way that new platform technology enables the provision of multiple services and goods from one platform?.

Discussion Point (3):

Under what conditions should an investor accept a risk-adjusted below-market return in exchange for an opportunity to achieve social impact? And how can we factor in entrepreneurial opportunities in setting impact objectives?

---

4. Evaluation and Measurement

Understanding and taking impact seriously means that evaluation and measurement are essential considerations for any impact driven project. The value of any investment is predicated upon adopting, using, analysing and interpreting meaningful metrics. To do so requires investors to be systematic about collecting relevant data. But what constitutes relevant data? In order to quantify impact Root Capital collects data on, for example, poverty levels in regions where an enterprise operates, expected performance of an enterprise in relation to addressing poverty, environmental vulnerability as measured by soil degradation, scarcity of water, threats to biodiversity and exposure to climate change, and scale as measured by number of farmers and workers reached by an enterprise (McCreless, 2016). Root Capital raise investment impact above enterprise impact because their objective is to subsidise loans that would not happen in a commercial market. The Grameen Bank ensures that the reach of an enterprise involves the community and especially women in that community. In all cases developing adequate measurement tools is dependent on the objectives set by the investor ideally in consultation with a beneficiary enterprise/community.

Discussion Point (4).

What metrics are best adopted for measuring social impact? Are there good examples of the use of appropriate metrics?

IEF 2016

References:

Bannick, M., P. Goodman, M. Kubzansky, andY. Saltuk (2016). ‘Across the Returns Continuum’ *Stanford Social Innovation Review*/Winter 2017; Vol.15 No.1: 42-48

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McCreless, M. (2016). 'Toward the Efficient Impact Frontier' *Stanford Social Innovation Review*/Winter, 2017; Vol.15, No.1: 49-53

eban

The European Trade Association for Business Angels, Seed Funds, and other Early Stage Market Players

Early Stage Investment in Europe today

09 December

ABAN – Lan – Rising Tide

1 Angel makes a difference

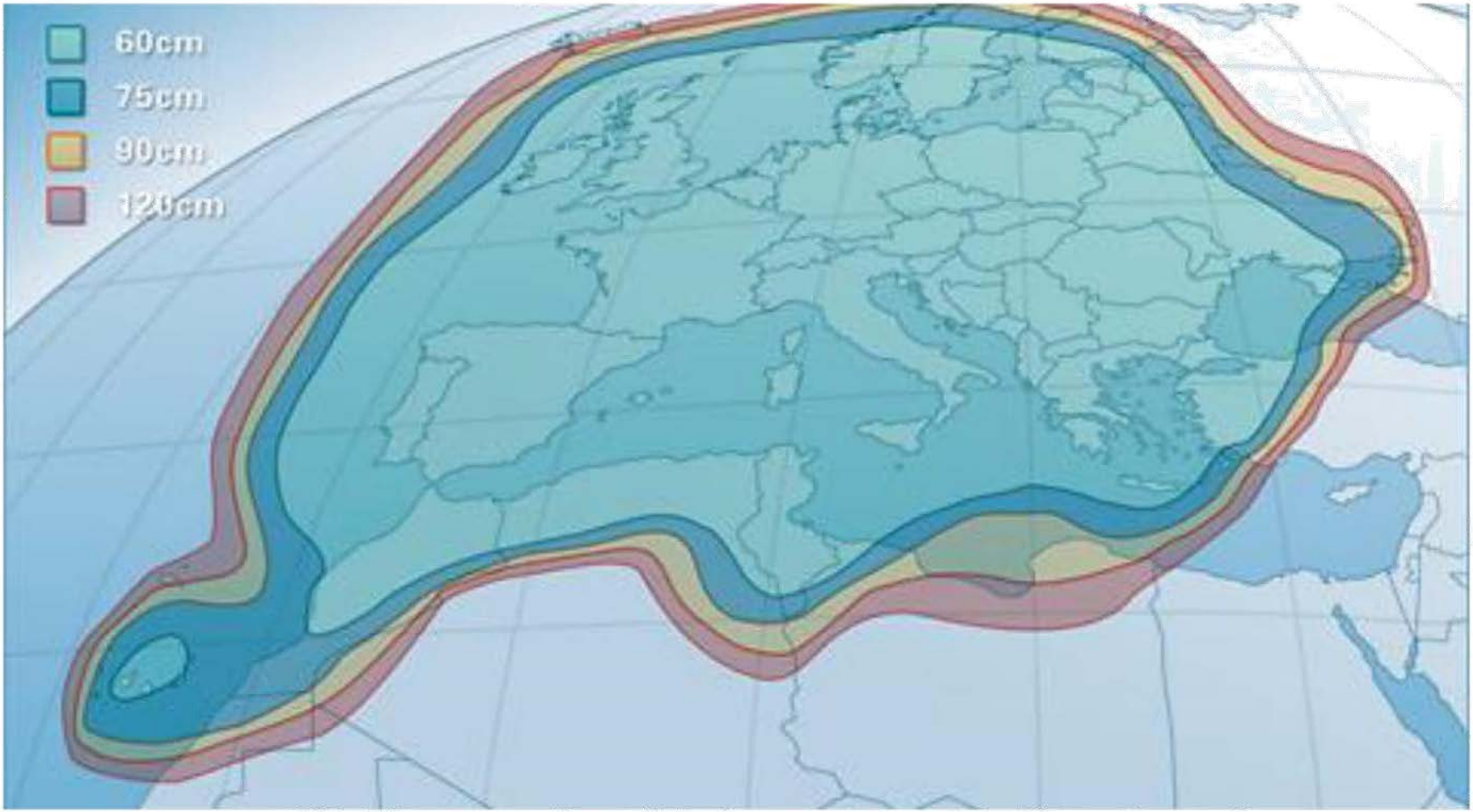
The Angel behind ASTRA and SES, the World's largest satellite system, built and grown in Europe

Count Roland de Kergorlay

Contract signed for Astra 1A
24 September 1985

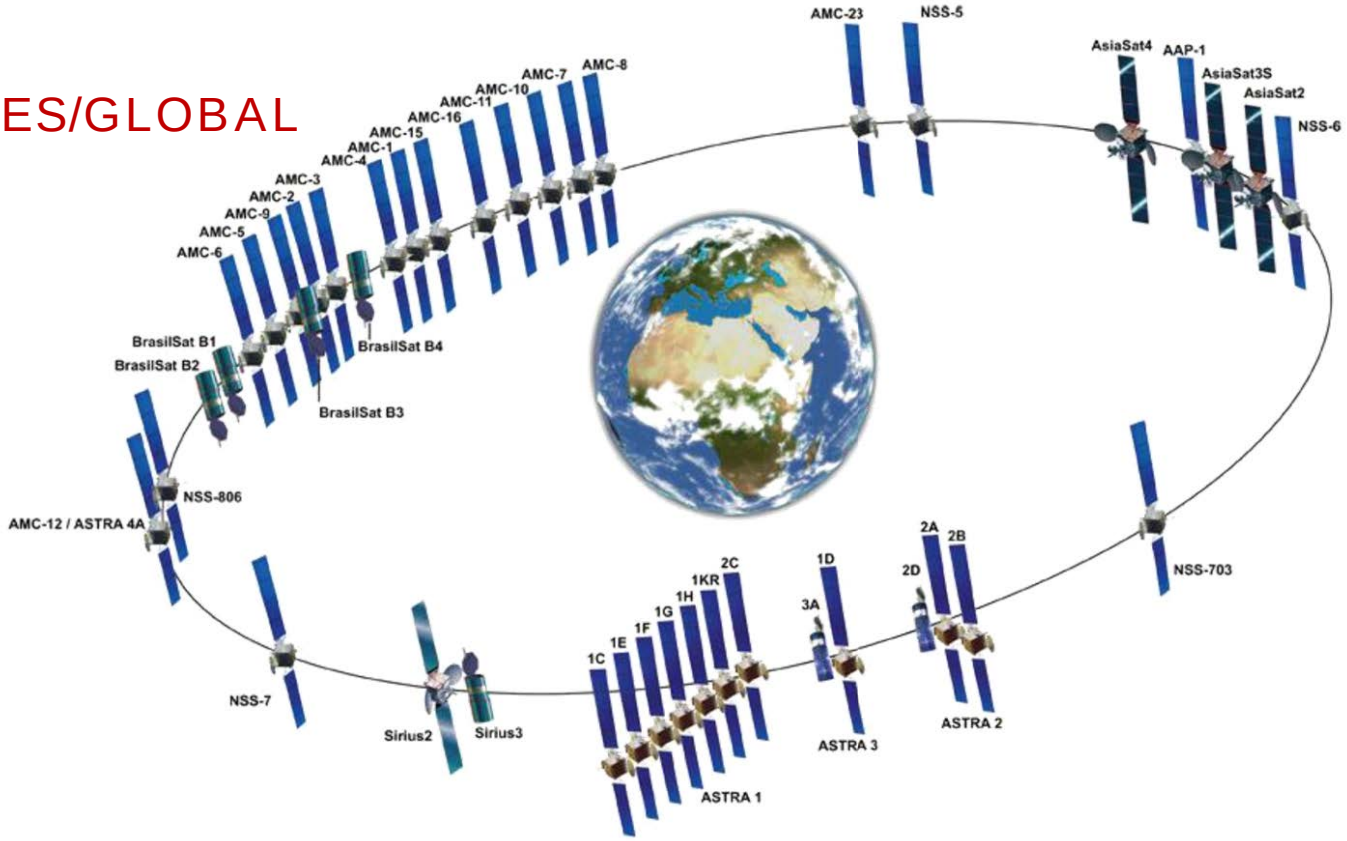
L-R
Roland de Kergorlay,
Vice-Chairman SES
Corneille Brück,
Chairman SES
Charles A. Schmidt
VP/General Mgr,
RCA Astro

Astra Footprint – the Potential




ПРОТОН

SES/ASTRA – SES/GLOBAL



- First private TV satellite in Europe (1983-1985)
- Monopoly Breaking
- Happy Day (Ann Glover)
- The Digital Revolution – Takeover (1993 – 1994)
- SES Global (1997/1998 – 2000)

www.eban.org

Being at the top is slippery and dangerous. You must constantly go Forward and be smarter, quicker, more innovative. Or… you can Sell out.

OCEANIA WOMEN'S NETWORK SATELLITE

Sallye Clark

Vicki MacLeod

Bridget Cosgrave

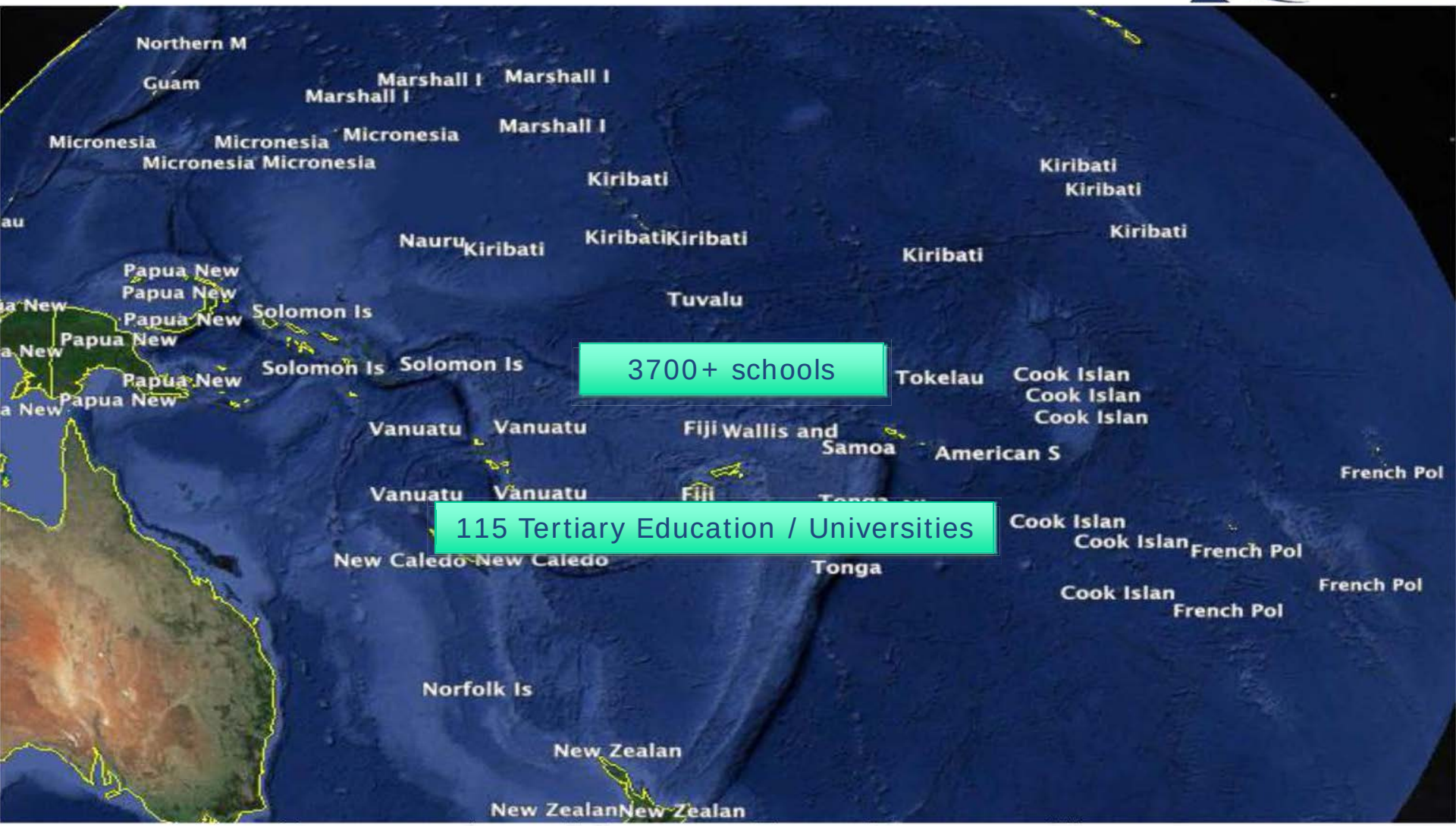
Audrey Mandela

Ellen Strickland

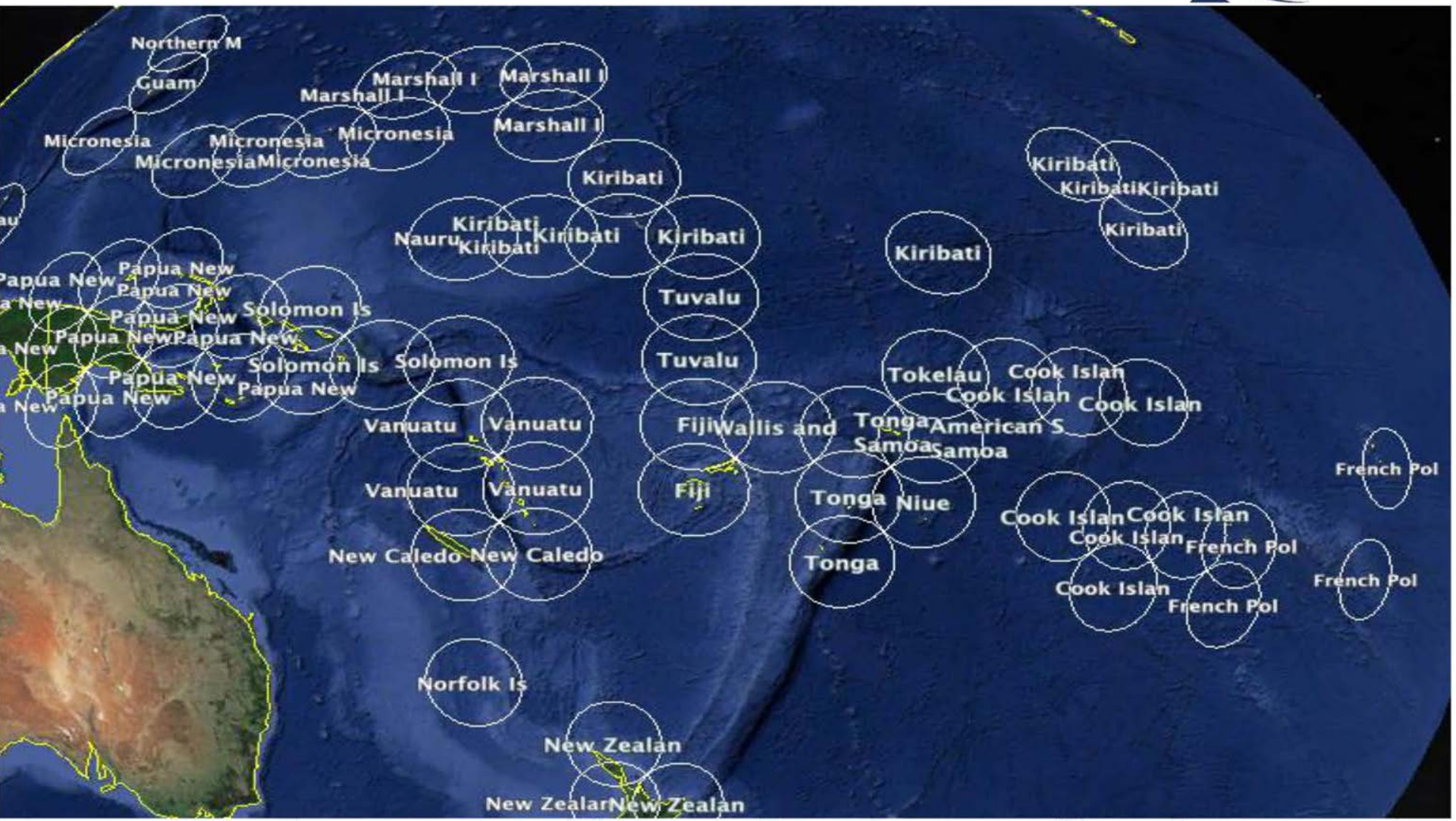
Walda Roseman

Candace Johnson

High Throughput Satellite – Why not in the Pacific?



The HTS concept applied to the Pacific market



Main Customer Segments

30 Pacific Island beams, each with 600 to 750km diameter and up to 500Mbps/beam (duplex) covering land and national waters

- **Education** (3800+ schools, universities)
- **Healthcare** (connecting remote clinics, mid-size hospitals)
- **Hotel broadband** (800+ hotels)
- **SME broadband**
- **Industry verticals** (finance, tertiary, processing plants)
- **Government services** (public services, ministries)
- **Public Safety**


CLIMATE CHANGE

SAVING LIVES

1.7 TRILLION ECONOMIC LOSSES (USD)

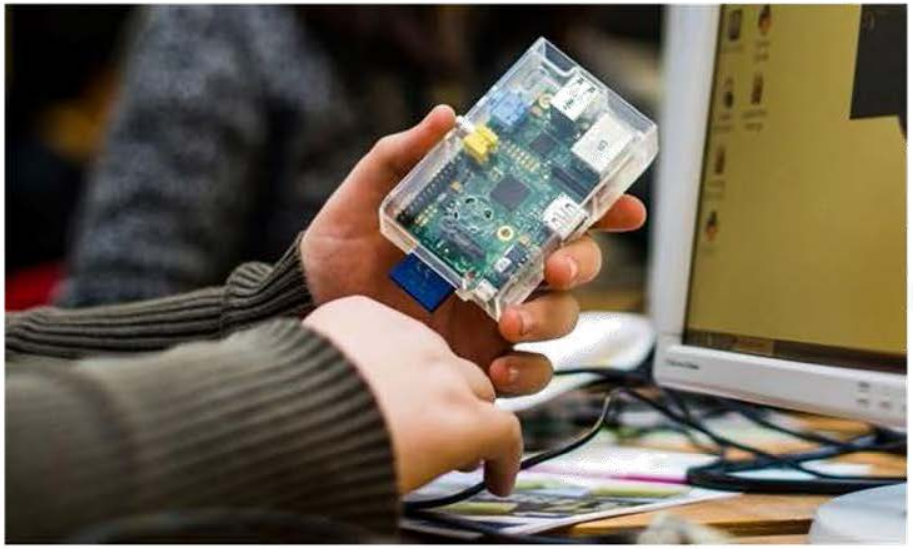
2.9 BILLION AFFECTED

1.2 MILLION LOST LIVES

DISASTER IMPACTS (2010-2012)

Raspberry Pi

Syria's children learn to code with Raspberry Pi



The Challenges

- No Single Market – E-Zone
- Focus on Start-Ups and not Scale-Ups - eXcelerator
- Need for large EMEA Market – ABAN/MBAN
- The Missing Link – Corporations
- Large Investment Funds – European Innovation Fund and Co-Investment Funds
- Big Data/Environment/Poverty/Cyber Crime

The Challenges and Solutions for Funding Science

- Investment and Business Plan for Europe's Scientists and Researchers
- Innovation Europe Fund – 1 Billion Euro Fund
- Space Funds

The Opportunities !

- To create a « Nation of Investors »
- To harness the power and creativity of the CEE countries with the older, western EU Countries
- To inspire, incubate, accelerate and scale-up world-class companies from Europe
- To create a Single Market and to expand it to the EMEA

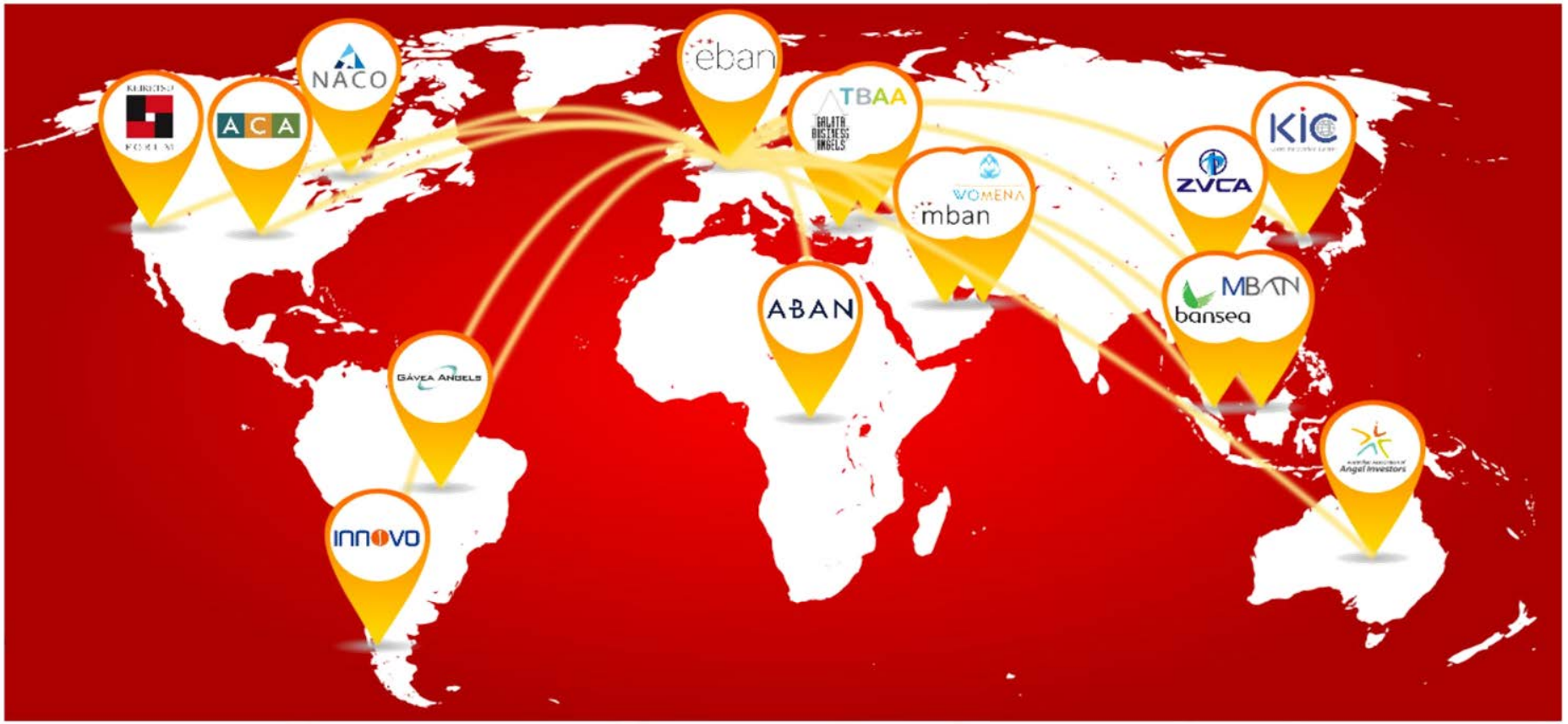
eban

- The voice of Early Stage Investors in Europe
- Not for profit organization based in Brussels
- Created in 1999 by Eurada with the support of European Commission
- Members in 55 countries
- 173members and growing!

Beyond Europe:

Australia	Brazil
Canada	Jordan
Kenya	Malaysia
New Zealand	Oman
Singapore	USA

EBAN's Global Network



EBAN Members

Business Angel Networks (BANs) and Federations of BANs Early Stage Venture Capital / Seed Funds

Business Angels

Business Accelerators

E-funding & Crowdfunding Platforms

Stock Exchanges and Electronic Funding Platforms

Corporations

Governments and Municipalities

(non-investors)

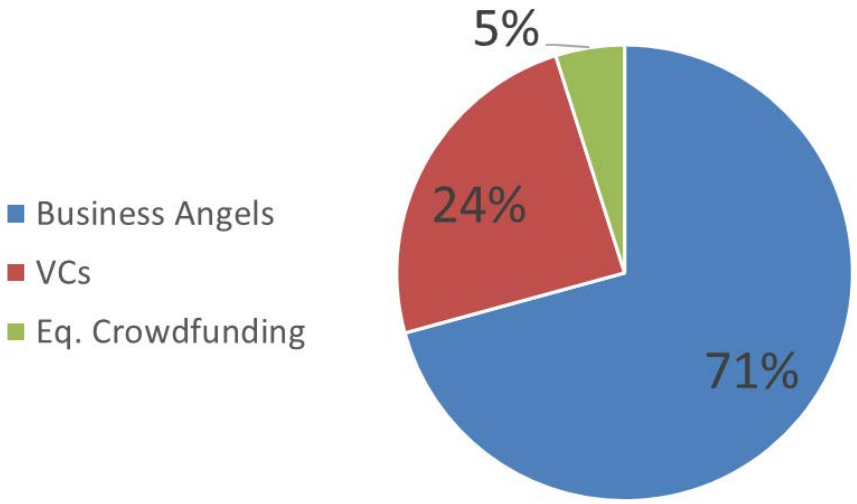
Associate Members *(Other entities involved in promoting the early stage investment market in Europe)*

www.eban.org

European Outlook

Year 2015

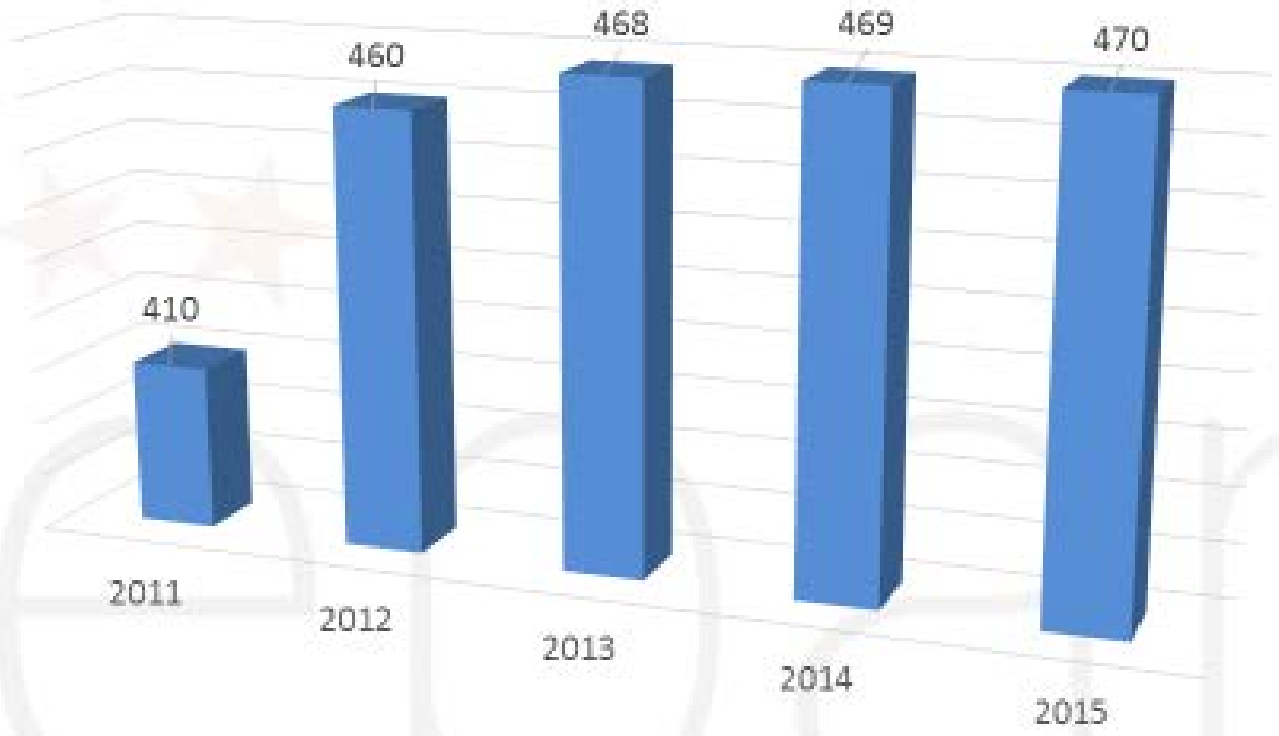
8,6b€	6,1b€	2,1b€	0,4 b€
European Early Stage Investment	Business Angels	[1]Early Stage VCs	[2]Equity Crowdfunding



[1]EVCA 2015

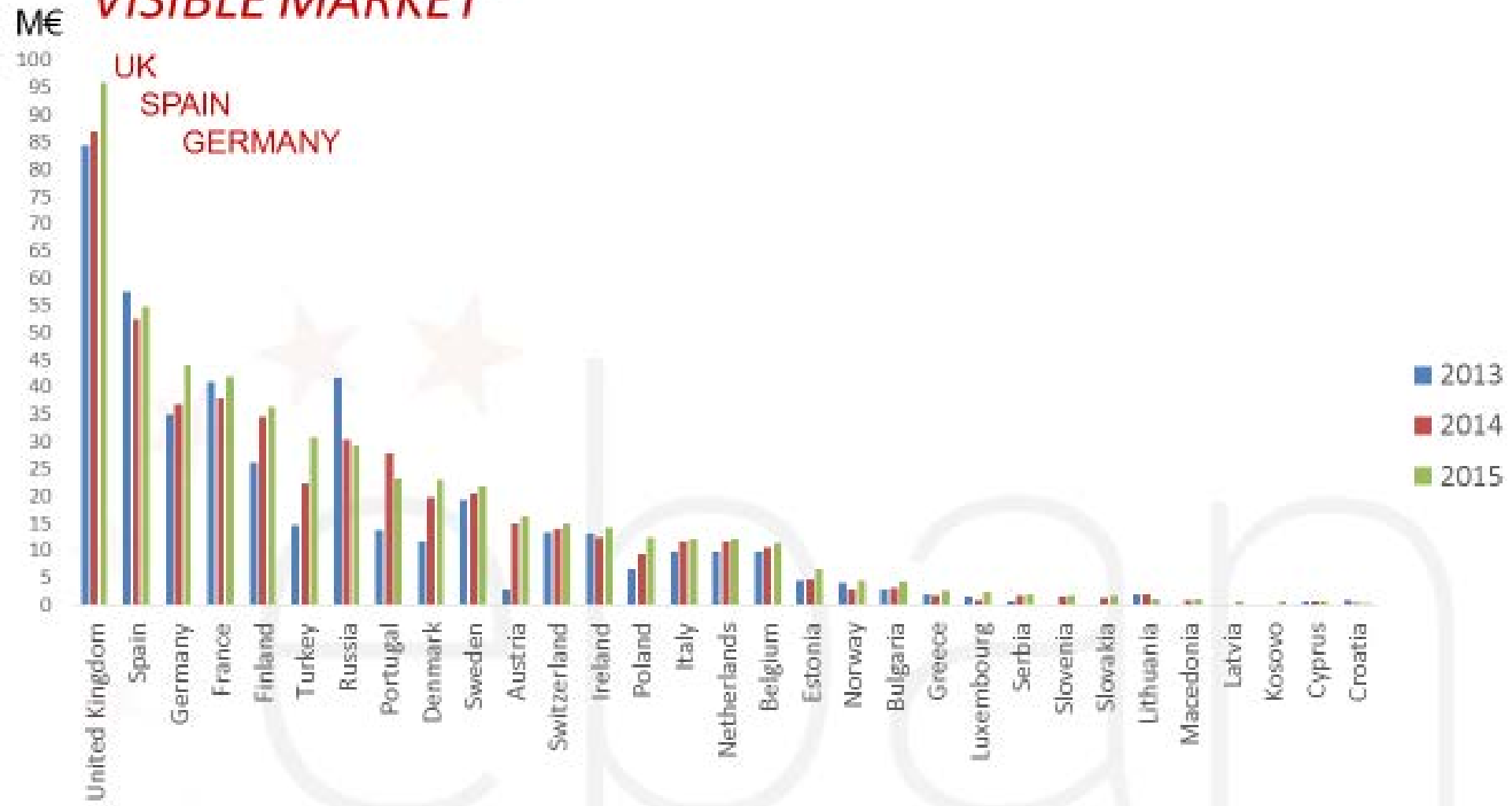
[2]EU Commission - CrowdSurfer Dashboard

Business Angel Networks



Market Growth By Country

VISIBLE MARKET



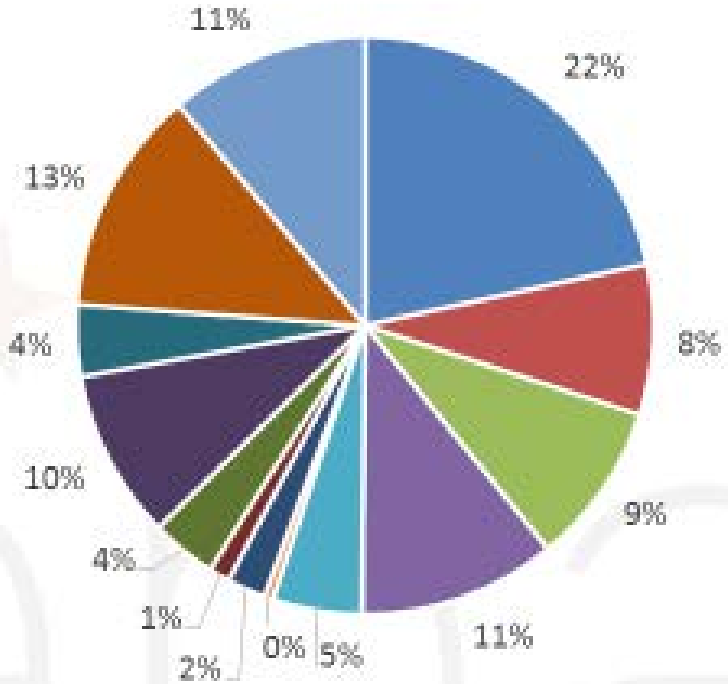
Angel activity

	2013	2014	2015
Average Investment per company	165.787	174.071	184.271
Average Investment per BAN	1.184.378	1.232.601	1.291.468
Average Investment per BA	20.437	20.000	19.990

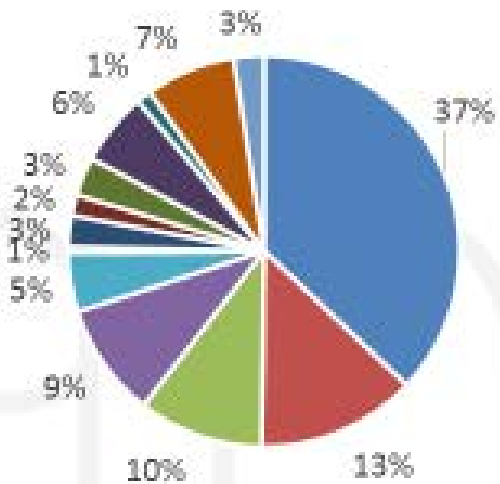
*BAN – Business Angel Network/Group

Investment by Sector

- ICT
- Mobile
- Creative Industries
- Biotech and Life sciences
- Health Care/MedTech
- Impact Investing
- Energy
- Environment and cleantech
- Retail and Distribution
- Finance and Business Services
- Logistics and transport
- Manufacturing
- Other



investment amount



deals

EBAN areas of activity

EBAN Activities

Annual Congress & Awards	**Winter University**	**Research** Data Collection & other publications
Eco-System European Commission National Governments Partner Organizations	**Working Groups** Impact Investment; Law & IP; Business Acceleration…	**European Business Angels Week** November
Webinars	**Training** for investors & entrepreneurs	**Networking & Deal Sharing**

EBAN areas of activity - Professionalization

Professionalization

- **EBAN Workshops and Trainings**
  - Lagos, Nairobi and South Africa – Supporting the new generations of Angels in the emerging markets
  - Trainings for Investors, Exit Masterclasses, Co-Investment workshops, Trainings for BAN managers, Tax incentives sessions…
  - Interviews and press releases sharing best practices
  - Webinars and online sessions
  - EBAN Institute

EBAN areas of activity - Research

Research

- **Statistics Compendium and Tax Incentives Compendium**
  - Research studies on Business Angel activity. Main reference point in Europe for all data and statistics in this industry
- **OECD Research Paper on Business Angel Investing**
  - Statistics on global Business Angel Investing in cooperation with OECD

EBAN areas of activity – Building the Eco-System

Building the Eco-System

- **E-Zone Paper**
  - EBAN is working with its private sector investment partners and the E-Residency program of Estonia to create an E-Zone for entrepreneurs, investors and innovators
- **Capital Markets Union**
  - Coordinated private investment sector response to the EU Capital Markets Union and EBAN's specific response from Business Angels
- **U.S. – EU Rountable on Making Ventures Grow and Estonian E-Residency and Digital Single Market Event**
  - Transatlantic meeting on best practices and recommendations for EU policy makers to stimulate growth in Europe – Attended by EU Commision VP Katainen
  - High level meeting hosted by Estonian Embassy with representatives from EC, large corporations and Early Stage Investors

EBAN areas of activity – Cross Boarder and Co-Investments

Cross Boarder and Co-Investments Initiatives

- **MENA Innovation Fund**
  - EIB, World Bank and MENA region Investors: EBAN members in the advisory committee
- **Rising Tide Europe**
  - Together with Rising Tide Ventures USA, EBAN will help bring 99 women together in Europe to create an Angel fund.
- **EIF Co-Investment Funds**
  - Regional and sector focus Co-Investment funds with EIF and EBAN Angel Networks.
- **Europe Innovation Fund**
  - Promoting multiple Angel Co-investment Funds in Europe with the EIB

EBAN Activities

eban Impact

Ambassadors of Impact Investing within EBAN, aims to pave the way to setting impact investing as the new standard of excellence.

eban Institute

Training for entrepreneurs, business angels and Business Angel Network managers. An education initiative fostering the development of business angels and entrepreneurial ecosystem.

e-Xcelerator

An EBAN group set up to develop a working alliance between Accelerators and Business Angel Networks across Europe, focusing on engagement and best practice.

And Now…

EBAN EU Projects

- **Future Internet Business, InvestHorizon, ePlus and !nnoVest**
  - EBAN is promoting investor and investment readiness of entrepreneurs and SMEs in Europe.
  - EBAN members are benefiting from these initiatives thanks to the events (Venture Academies and Investor Forums) co-organized in the scope of these Projects

EBAN Current Initiatives 2014-2016

EBAN is extending its horizons all across the board – to new geographies, to new sectors, to new challenges (1/3)

MBAN – The MENA Business Angel Network	EBAN is privileged to be working with Arabreneur, Anima, and Hub9 to incubate and establish the MENA Region's first Business Angel Investor Network, http://www.m-ban.org
ABAN – The African Business Angel Network	EBAN is working with VC4 Africa to incubate and establish ABAN, the African Business Angel Network, http://www.aban.org
Global Business Angel Network, Global Accelerator Network, and Start-Up Angels	EBAN is proud to be a founding member and co-chair of the Global Business Angels Network and partner with Global Accelerator Network and Start-Up Angels

EBAN Current Initiatives 2014-2016

EBAN is extending its horizons all across the board – to new geographies, to new sectors, to new challenges (2/3)

E-Zone and Innovation Europe Fund	EBAN is working with its private sector investment partners and the E-Residency program of Finland to create an E-Zone for entrepreneurs, investors and innovators, http://www.eban.org. In addition, EBAN is working on creating the Innovation Europe Fund
Global Success Stories – Cross Border and Cross Continental Investment	Creating, Financing and Building Global Success Stories from the EMEA is one of the main goals of EBAN/MBAN/ABAN
USA-EU Roundtable on Making Ventures Grow	Recently, EBAN organized the first ever Trans-Atlantc USA-EU Roundtable on Venture and Entrepreneurial Finance – Making Ventures Grow, http://www.eban.org

EBAN Current Initiatives 2014-2016

EBAN is extending its horizons all across the board – to new geographies, to new sectors, to new challenges (3/3)

EU Capital Markets Union	Coordinated private investment sector response to the EU Capital Markets Union and EBAN's specific response from Business Angels perseptive who play an important role in Capital Markets, http://www.eban.org
First-ever Cross Border Angel Investment in Slush Winner and EBAN-ESA/EBAN-ERC partnerships	20 EBAN members from 20 countries invested 500 K Euros into Slush winner at EBAN WU. EBAN has recently made partnerships with ESA and ERC.
Rising Tide Ventures Europe in conjunction with Rising Tide Ventures USA	EBAN has recently joined together with Rising Tide Ventures USA to bring 99 women together in Europe to create a 1 million Euro Angel fund

www.eban.org

EBAN as EU Project Participant

- InvestHorizon
- ePlus
- Future Internet Business
- EC Guidebook No. 9 on European Structural Funds Co-Investment with Business Angels

EBAN helping coordinate European Eco-System

- E-Zone Paper
- US-EU Dialogue on Making Ventures Grow
- Capital Markets Union Paper
- Innovation Europe Fund
- Enabling Science to Business – ERC
- Creating New Space Europe with ESA, Airbus, etc
- e-Xcelerator - Amadeus, Airbus, Cisco, Google, Microsoft
- Congresses, etc.

EBAN Current Initiatives 2014-2016

EBAN has a number of excellent committees to complete our work

EBAN Impact Investment Committee	Under the Presidency of Hedda Pahlson-Moller, this is one of the most dynamic committees of EBAN
E-Xcelerator Committee	EBAN group set up to develop a working alliance between Accelerators and Business Angel Networks across Europe, focusing on engagement and best practice.
EBAN Co-investment Committee (COIN)	The European Commission has started a co-investment program with the European Structural Funds which our EBAN COIN is working with very hard.

EBAN Current Initiatives 2014-2016

EBAN has a number of excellent committees to complete our work

EBAN Research Committee	EBAN conducts Tax Incentive and Co-Investment Compendiums, our EBAN Angel Statistics, and OECD Studies
EBAN EU Funding Projects Committee	EBAN is very involved in Horizon 2020 projects and is currently active in 3 projects.
EBAN Intellectual Property Committee	EBAN Intellectual Property Studies are crucial to our members

Startup Investors Manifesto

A brief guide to grow early stage investment in Europe to €15 billion and generate 1,5 million new jobs by 2017

	KEY ACTIONS
Inspiring a co-investment culture amongst different market stakeholders	• *Set up co-investment funds with public and private funds.* • *Focus on cross-border co-investment to attract funds to emerging markets* • *Change mindsets and convert grants into financial instruments*
Taxes as drivers for innovation and re-allocation of funds	• *Incentives to change passive capital into wealth and jobs generating investment* • *Save startups from heavy tax burden*

Startup Investors Manifesto (2)

	KEY ACTIONS
Increasing market liquidity to avoid equity gaps	• *Raise venture capitalists capacity with a "fund of funds" facility* • *More engagement from corporate investors* •*Adapt regulation to the needs of growing startups or how to prevent them to go public in the US* • *Easy on capital adequacy requirements for institutional investors of early stage VC funds*
Raising awareness and changing mindsets towards a favorable risk culture	• *Education for both entrepreneurs and investors* • *Campaign: "Proud to be an investor"* • *Recognise investees and investors*
Making investment easier and clearer for both businesses and investors	• *Standardise and facilitate company creation anywhere in Europe* • *Set a common definition for business angel* • *Better data collection*

Check for more!

ABAN
african business angel network

mban The MENA Business Angels Network, Seed Funds and Early Stage Market Players

Rising Tide Europe Venture Investment Program EBAN | Go Beyond Investing

Candace Johnson, President EBAN. president@eban.org
Brigitte Baumann, President Emeritus EBAN and CEO Go Beyond Investing. brigitte.baumann@go.beyond.biz
Cindy Naegel, cindy.naegel@go-beyond.biz

Creating the E-Zone

Estonian e-Residency Program

EBAN and ESA Join Forces to Make Entrepreneurship and Investment in Space a New Asset Class for Europe. Space is Europe's Destiny !

Fueling Europe's Growth

European Space Agency

Contacts

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www.eban.org

Linked in Groups

EBAN Newsletter

IEF CONFERENCE 15 /12/2016

Mandisa Tshikwatamba
Seda CEO

Definition – No universally accepted definition – Private initiative with public interest

- Key attribute: Disruptive solutions that bring or cause change to social problems as an extra mile to economic impact indicator
- Social value creation first as the lead driver in the enterprise concept - profit making but profit greatly invested back to the initiative
- Inclusive participation – collective ownership and collective benefit

PROGRESSIVE MOVES TO SUPPORT SE INITIATIVES

- stockvelds /self regulated social banking/savings schemes
- regulated cooperatives finance institutions and micro finance institutions capitalizing on social collateral and recognizing 'dead assets'

Value Definition – Investors' Value Guide

- Filling a gap between social needs and public capacity
- Innovative crowd funding means using public funds and private funds
- Service with direct benefits to the community
- Address social exclusion and unemployment
- Twin funding approaches; investors' contribution and grant funding or grant funding either from a public or private scheme and loan finance primarily from a social financing scheme or a public finance scheme or a combination of most of these
- Support from a BDS agent that will also give assurance on governance matters in addition to BDS facilitative role and facilitating resource proposal interventions and team dynamics management.

Inclusive Innovative Support Strategies

- Loan guarantees, reduce collateral burden and cost of finance
- Quasi –equity debts; founder or security holder without claim on ownership or governance but using terms and conditions of funding to give incentive for efficient management and drive for certain performance standards
- Pooling/Crowd funding; community based micro finance and cooperative finance and other social banking schemes
- Capex grant funding for operating equipment and infrastructure and capacity bulding grant funds
- To explore – Social Impact Bonds (new concept in SA)

Social Impact Measure

Blended value accounting

- Viability of the business plan
- Ability to secure investment /social capital factor – value networks capacity – reciprocity, trust and cooperation and common good
- Ability to keep impact data
- Credibility of evidence portfolio management processes
- Methodology of data and evidence gathering and management
- Results alignment to purpose as per pre-investment proposal
- Benefits alignment and solution to problem context

Story of women empowerment among many from a Seda supported incubator; Timbali…turning ordinary women to small scale farmers.

I am Josephine Skhosana. I live at Coromandel Farm and have three children. Before I came to Timbali last year, I was unemployed and struggling a lot. It was so bad that I could not pay school fees for my children. Now, however, I can afford a lot of things! At Timbali I own a block of baby marrows and I have learned about different types of irrigation, how to operate a tractor, and how to apply fertiliser. I am ready to start a business when I'm done at Timbali because I have learned a lot.

Timbali derives its sustainability as an organisation from two sources: donor funding to fulfill its skills development and incubation mandate, and revenue earned from the market. The latter takes the form of rent and levy payments from the farmers, and the income generated through the pack houses and supply chain services Timbali provides. The farmers build sustainable microbusinesses on the income they generate from selling their produce and the support they receive from Timbali. The farmers pay for this support, which includes coordinated production, market access and technical advice, admin and accounting services, and infrastructure development and maintenance, through levies.The skills development that the farmers receive is made possible by the donor funding Timbali receives from the government and from private organisations.

When the two women started out, they lacked business skills such as financial management, business planning, administration and marketing. They did not have business plans, did not understand the markets they wanted to operate in and struggled to build a local client base. Accessing export market opportunities for their produce was not even a possibility.

Neither Koekie nor Selina had farming skills, not to mention farming and office equipment. If they were going to succeed, they would also need mentoring. The Timbali Technology Incubator business advisors mentored Koekie and Selina on business development processes, record keeping, quantification, and how to make data-driven decisions through the use of, for example, soil analysis. They were taught to use the Timbali operating manuals to improve their skills and implement best practices. For both women, the results in terms of quality and quantity of produce have been remarkable.

On both their farms yield per hectare doubled from 30 tonnes to 60 tonnes, along with sharp improvements in technical KPIs such as irrigation, fertilization, chemical application, planting schedules and adherence to Global GAP standards. As a result of the quality and yield improvements, Koekie and Selina secured contracts with large customers such as Tiger Brands, Technoserve and NTK. They now also supply local Shoprite, Checkers and Spar outlets.

Consequently, their business turnover grew by 70% in 2015. Both their businesses – Addagio Farm and NNdivhaleni Farm and Trading – have matured into financially sound SMEs with lucrative contracts and solid financial management and administration. Based on their strong administration track records, Koekie and Selina have qualified for production loans from the Women Development Bank.

Having started with three permanent staff members, Koekie now employs seven people. In addition 10 seasonal workers, up from five, work on the farm when needed. Selina's original workforce of three has grown into eight permanent staff members, and she employs 12 seasonal workers, up from five, when she needs extra hands.

What is the benefit – Policy Makers

- Success of a social enterprise model demonstrated through replication and growing number of graduating incubates standing on their own
- New breed of entrepreneurs – cooperative driven than competitive driven – agents of change than agents of capitalism, creating Enterprise ecosystems
- Enterprises without borders; open to collaboration and cooperative means

- Social impact value; transformation, human capital empowerment, economic empowerment, contribution to job creation, dead resource value regeneration, breaking poverty cycle

More case studies dominating in certain areas notwithstanding the need for further work

- Education, health, housing, agriculture, art-craft and tourism, social services and financial sector, enterprise support and public works initiatives.
- Gap; Framework for measuring social impact in Social Enterprises

… Make them account for what? Who is carrying the value barometer and if not one value finder ….What is the start value finder

- Saving SE from value finder fatigue… Proposal acrobatics and Reporting burden

Female Entrepreneurship and Female Owned SMEs

Chair: Prof. Pooran Wynarcyk
University of Newcastle, United Kingdom

Co-Chair: Dr. Silke Tegtmeier
President-elect, European Council of Small Business,
University of Southern Denmark and Leuphana University, Germany

Prof. Jantje Halberstadt
Leuphana University of Lüneburg, Germany

Prof. Urve Venesaar
Tallin University of Technology, Estonia

Rare, but Exceptional – Women in Entrepreneurship: High Growth, Science and Technology (S&T)-based SMEs and Globalization

The way we address women's role in entrepreneurship is somewhat contradictory:

On the one hand, it apparently became common sense that women's participation in higher education and at the labour market has enhanced extremely (Devos et al., 2008). In line with this, scholars as well as policy organizations do not stop to stress that women entrepreneurs play a significant and growing role in economies and welfare worldwide (De Bruin et al., 2006; Acs et al. 2011; Sternberg et al. 2013; Xavier et al. 2013; Terjesen and Lloyd 2015; European Commission 2016). For the last two decades, research has paid specific attention to studying women's entrepreneurship. Particularly, the DIANA project as well as its DIANA International Research Conference (Brush et al., 2001) gained a high reputation. Global research initiatives, such as the Global Entrepreneurship Monitor (GEM) as well as the Global Entrepreneurship and Development Institute (GEDI) include specific reports to women's entrepreneurship (Kelley et al., 2015; Terjesen and Lloyd, 2015).

On the other hand, the so-called gender gap in entrepreneurship still seems to be apparent and significant (Arenius and Kovalainen 2006; Gatewood et al. 2003; Reynolds et al., 2004; Verheul et al. 2006). Not only do less women start a business than men (in many countries worldwide), but also only a small percentage of women entrepreneurs does show high growth rates (Gupta et al., 2009; Marlow, 2002). Many research endeavours reveal manifold reasons for this gender gap: Several approaches focus on women's personality traits in comparison to men's (Wilson et al. 2007; Caliendo et al. 2009; Sexton and Bowman-Upton 1990; Brush 1992; Tchouvakhina 2004), women's human capital (e.g. Furdas and Kohn 2010), and their social network (e. g. Aldrich et al. 1989; Renzulli et al. 2000; versus Caputo and Dolinsky 1998; Cromie and Birley 1992; Jungbauer-Gans 1993), or influence factors in women's family and society (e. g., McManus 2001; Boden 1996; Brush 1992; Carr 1996; Ettl and Welter, 2010; Gurley-Calvez et al. 2009; Lohmann 2001, Bruce 1998; Caputo and Dolinsky 1998; Carr 1996; Lauxen-Ulbrich and Leicht 2004).

Due to the child care argument among others, entrepreneurship has widely been regarded as a male field of activity (e.g., Achtenhagen and Welter 2011; Baker et al. 1997). However, nowadays, in many countries there are increasing facilities for childcare, such as day nurseries or kindergartens. Parents can agree on more egalitarian and flexible arrangements (Devos et al., 2008). However, stereotypical perceptions still exist, although in more subtle ways (Devos et al., 2008; Ahl, 2006, Butler, 1990 and 1993). In this context, gender needs to be regarded as socially constructed. It is combined with

appropriate behaviour the society expects (Ahl, 2006). Because of the ongoing repetition in societal behaviour, scholars use the term "doing gender" (Ahl, 2006; Butler, 1990, 1993). While dominance, independence, and aggressiveness are seen as masculine characteristics, emotionality, passivity, and warmth are seen as feminine characteristics (Hardy, 1995). Instead of taking male entrepreneurs as the norm, scholars suggest to focus on women specifically instead of considering them as a homogeneous group and as the opposite of man (Tegtmeier et al., 2016; Tegtmeier and Mitra, 2015; Ahl 2006; Ahl and Marlow, 2012; Hughes et al., 2012).

It is widely acknowledged that science and technology-based SMEs are amongst the key components of a dynamic process of national and regional economic development. The growth and global competiveness of this 'atypical' segment of the SME sector rely heavily on the strength of scientific and technological expertise and a highly skilled labour force. Existing research clearly demonstrates that young girls and women are under- represented in the Science, Technology, Engineering and Mathematics (STEM) education. Concerns about the 'gender gap' in these fields have been increasingly raised and addressed by some governments and other organizations around the globe, resulting in the development of numerous positive action measures and gender specific initiatives. Despite some significant improvements in certain scientific and related fields in recent years, the scientific labour market and enterprises remain, in general, male dominated around the globe due to some specific and persistent institutional, professional and personal barriers faced by women (Rosa & Dawson, 2006; Rosser, 2009); Wynarczyk and Marlow, 2010; Wynarczyk and Ranga, 2017, forthcoming).

This workshop aims to bring together several experts to discuss and debate, through a gendered lens, some key issues surrounding the growth and development of S&T based SMEs, including for example, STEM pipeline (education, career), specific barriers faced by women, open innovation, role of networks, public policy, internationalization activities, and commercialization of technology.

The panel aims to identify barriers, discuss and debate possible solutions and examples of good practice in HEIs, industry, and government and offer recommendation in order to promote and enhance greater participation of women in scientific and technological advancement in advanced, emerging, and developing around the world.

A selection of recent research reveals some cutting-edge results:

- When it comes to growth intentions, one major reason against such intentions is the perception of growth endangering the quality of the services offered by the business, while a major reason for growth intentions is fun and excitement (Bulanova et al., 2016).

- A recent study on women-led high-tech start-ups reveals that those start-ups are "more capital-efficient, achieve 35% higher return on investment, and—when venture-backed—generate 12% higher revenue than male-owned tech companies." (Wadhwa/Mitchell, 2013).

- Although maximizing lifetime income is not necessarily among women's key motives to become entrepreneurs, women entrepreneurs are indeed Jacquelines-of-all-trades as their male counterparts are (Tegtmeier et al., 2016).

- The number of role models is positively associated with entrepreneurial intentions (Austin/Nauta, 2016).

Questions

- Entrepreneurship is Entrepreneurship: Should we pay specific attention to women at all and if so, why?
  If only few women have entrepreneurial intentions and specifically intentions to grow or internationalize their business, shouldn't we accept this fact? Why should we care? Do we need to motivate more women to engage into entrepreneurial activities? Why?

- Growth is a choice which is personal and strategic – Can and should this be influenced? If so, how?
  Should we aim for more growth at all (see e.g. the Triple Bottom Line approach which claims for the integration of social, environmental (or ecological) and financial value)? Do we need a new approach to firm performance? (If not,) how can the potentials of women entrepreneurs best be translated into ideas that are truly high growth and scale-able?

- What is the relative contribution of the entrepreneurship ecosystem (macro level), the firm (meso level) and individuals and dynamics (micro level) to successful women's entrepreneurship?

- What are the gender differences in and impact on commercialization of technology in terms of, for example, creation of new technology/scientific-based SMEs, access to finance, sector of activity, social impact framework (e.g., climate change, green issues), solutions to societal challenges, access to role models and mentors, informal and formal networks, leadership style, access to market, business support, education and training?

- What are the opportunities and challenges, specifically faced by women, brought about by globalization and contemporary innovation and commercialization models, e.g., open innovation?

- What are the key roles of HEIs technology transfer officers and commercialization policies in enhancing women's participation in the creation of university spinoffs?

- Are there any examples of good practice in university, industry, and government that promote and enhance greater participation of women in high technology and scientific-based ventures, hence internationalization activities?

Panel: Rare, but Exceptional – Women in Entrepreneurship:
High Growth, S&T-based SMEs and Globalization

15th International Entrepreneurship Forum (IEF) Conference
Venice, 14-16 December 2016

Chairs:

Prof. Pooran Wynarczyk, Newcastle University Business School, UK

Prof. Silke Tegtmeier, University of Southern Denmark

Panelists:

Prof. Jantje Halberstadt, Leuphana University of Lüneburg, Germany

Prof. Urve Venesaar, Tallinn University of Technology, Estonia

Women the Vital Pool of Talent

'*Over the Next Decade, the impact of women on the global economy will be at least as significant as that of China and India*'

Ernst and Young, 2013

Key purpose of the panel:

- Brings together our panel of experts to discuss and debate some key issues surrounding the participation (or lack) of women in entrepreneurship, with particular focus on high growth and science and technology SMEs
- Identify barriers, discuss and debate possible solutions and examples of good practice in education, HEIs, industry, and government that support women to fulfil their potential
- Offer recommendations for research, education, policy and practice

Format of the Panel

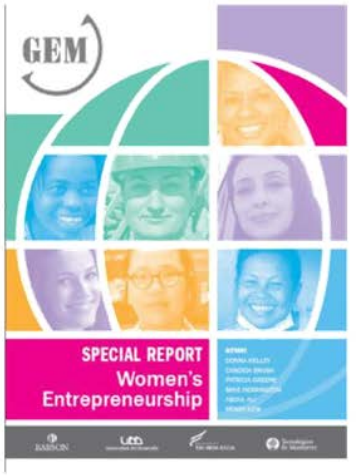
TOTAL TIME 90 MINUTES

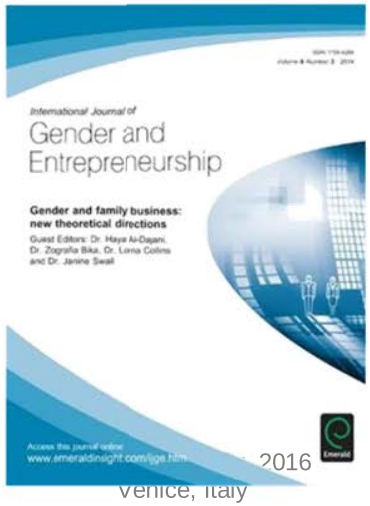
- 1. Self-Introductions (just names and affiliations) by panelist (total 5 minutes)
- 2. Introduction to the topic by Chairs 15 minutes
- 3. Discussion by panelists 40 minutes
- 4. Audience participation 20 minutes
- 5. Wrap up by Chairs 10 minutes

Setting the Scene: Women Entrepreneurs Play a Significant Role

- Women's participation in higher education & at labour market enhanced extremely (Devos et al., 2008)
- Women entrepreneurs play significant & growing role in economies & welfare worldwide (De Bruin et al., 2006; Acs et al. 2011; Sternberg et al. 2013; Xavier et al. 2013; Terjesen/Lloyd 2015; European Commission 2016)

Research Pays Specific Attention to Studying Women's Entrepreneurship





Gender Gap Still Apparent & Significant

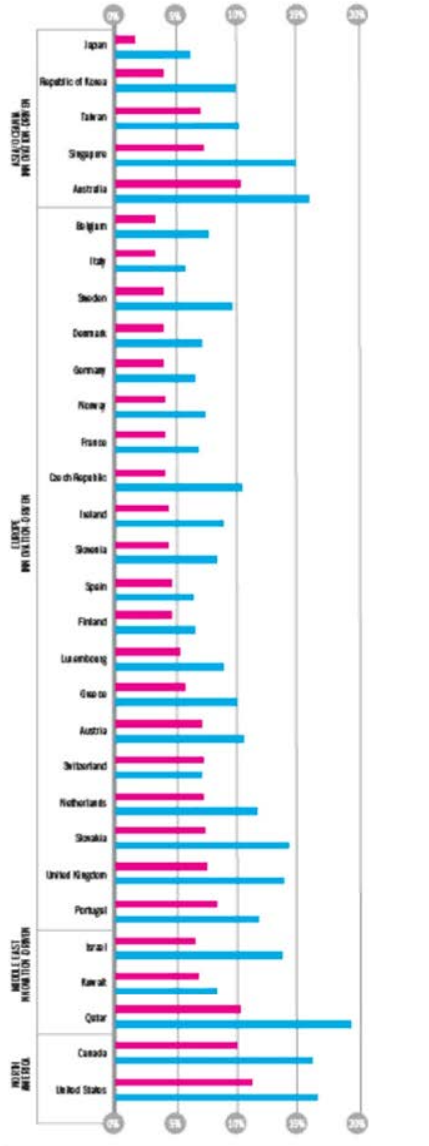


Figure 4: TEA Rates for Innovation-Driven Economies, by Region and Gender

Kelley et al., 2015

Small Percentage Shows High Growth Rates

Terjesen and Lloyd, 2015

Manifold Reasons for Gender Gap

- Women's personality traits in comparison to men's

  (Wilson et al. 2007; Caliendo et al. 2009; Sexton and Bowman-Upton 1990; Brush 1992; Tchouvakhina 2004)

- Women's human capital (e.g. Furdas and Kohn 2010)
- Women's social network (e. g. Aldrich et al. 1989; Renzulli et al. 2000; Caputo/Dolinsky 1998; Cromie/Birley 1992; Jungbauer-Gans 1993)
- Influence factors in women's family & society (e. g.,

  McManus 2001; Boden 1996; Brush 1992; Carr 1996; Ettl/Welter, 2010; Gurley-Calvez et al. 2009; Lohmann 2001, Bruce 1998; Caputo/Dolinsky 1998; Carr 1996; Lauxen-Ulbrich/Leicht 2004).

- Entrepreneurship widely regarded as male field of activity (e.g., Achtenhagen/Welter 2011; Baker et al. 1997)

But…

- Increasing facilities for childcare (day nurseries or kindergartens)
- Parents agree on more egalitarian & flexible arrangements (Devos et al., 2008)

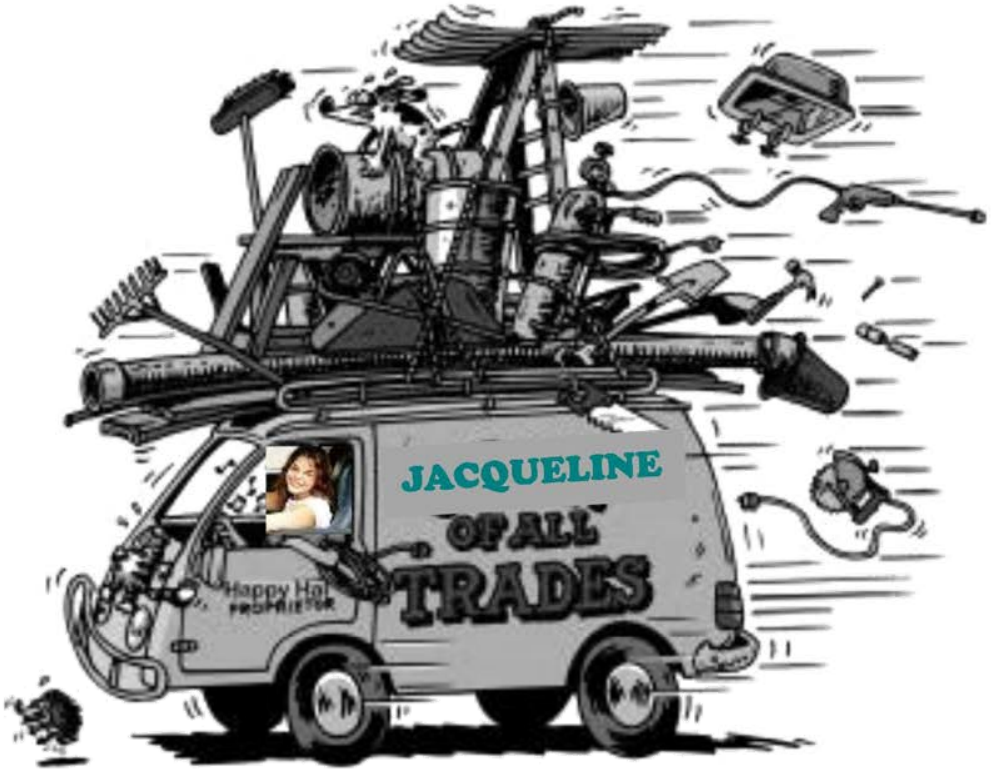
However…

- stereotypical perceptions still exist, although in more subtle ways (Devos et al., 2008; Ahl, 2006, Butler, 1990 & 1993)
- gender socially constructed, combined with appropriate behaviour society expects (Ahl, 2006). Instead of male entrepreneurs as norm, focus on women specifically instead of considering them as homogeneous group & as opposite of man (Tegtmeier et al., 2016; Tegtmeier/Mitra, 2015; Ahl 2006; Ahl/Marlow, 2012; Hughes et al., 2012)

Recent Findings

- Growth intentions: major reason against is perception of growth endangering quality of services offered, while major reason for growth intentions is fun & excitement (Bulanova et al., 2016)
- Women-led high-tech start-ups are “more capital-efficient, achieve 35% higher return on investment, &—when venture-backed—generate 12% higher revenue than male-owned tech companies.” (Wadhwa/Mitchell, 2013)
- Number of role models positively associated with entrepreneurial intentions (Austin/Nauta, 2016)

Recent Findings



(Tegtmeier et al., 2016, SBE)

The importance of the SME sector

400m in 54 Countries that are included in Global Entrepreneurship Monitor (GEM).

23m in Europe, two out of every three European jobs are in SMEs.

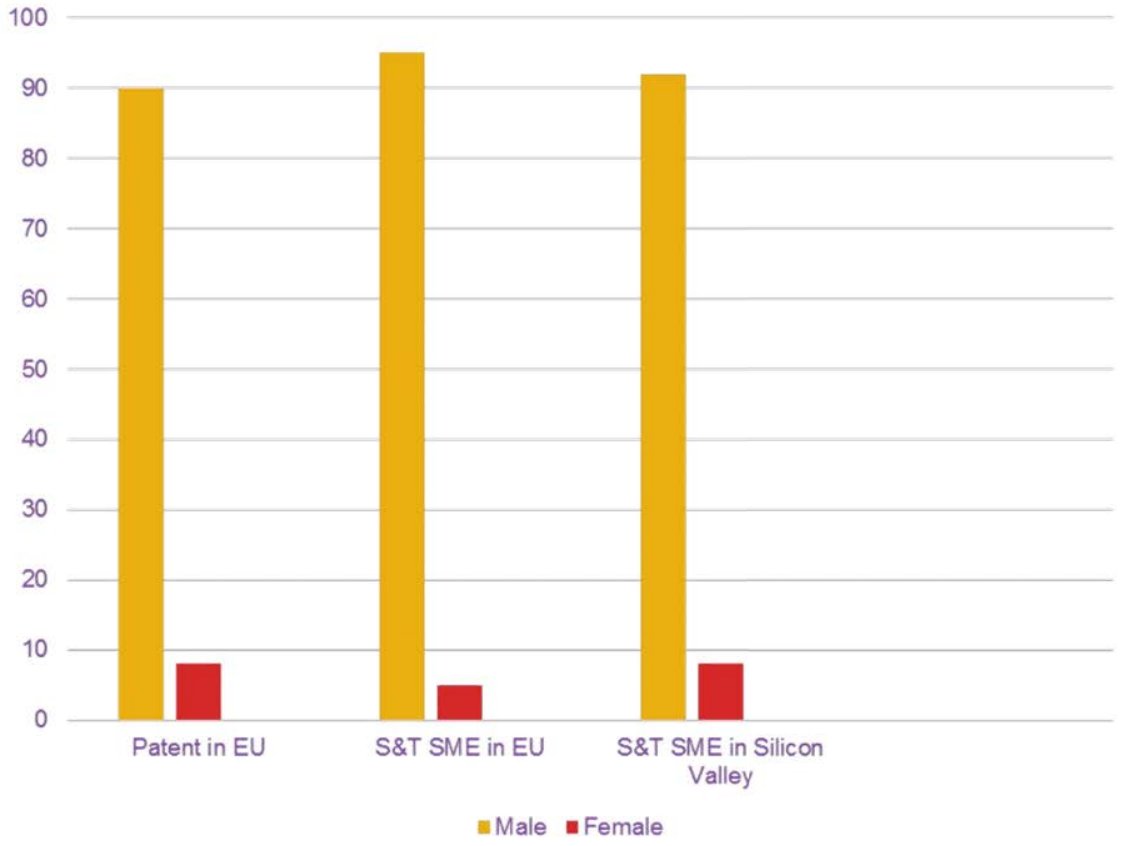
S&T based SMEs constitutes a small proportion of the total population but responsible for the majority of positive effects in terms of innovation, new product development, and thus jobs and wealth creation.

Link between S&T based SMEs, Innovation and globalisation

- Export successfully; and
- Achieve higher growth from globalisation

(Love and Roper, 2013; Wynarczyk, 2013).

‘Gender Divide’ in Commercialization and S&T owned SMEs

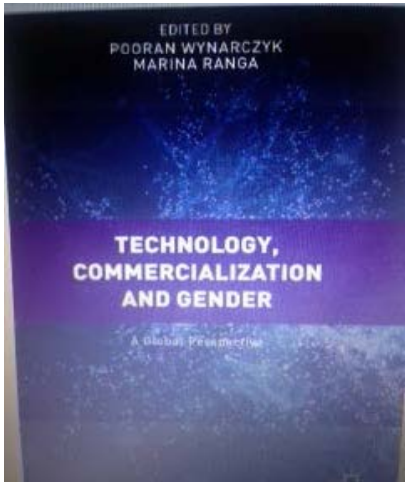


Negative impact

'The focus of global scientific research has shifted from basic to applied research and innovation, for which one of the primary indicators is patents granted. Women scientists are not obtaining patents at rates comparable to their participation in the STEM workforce and at significantly lower rates than their male peers, hence, women are not participating in the new areas and directions for S&T.

This hurts women scientists and engineers who are left out of the leading-edge work in innovation. Women are then not seen as leaders in their field, which hurts them financially and in their professional advancement.'

Professor (Provost) Sue V. Rosser, San Francisco State University
in Pooran Wynarczyk and Marina Ranga, forthcoming, 2017

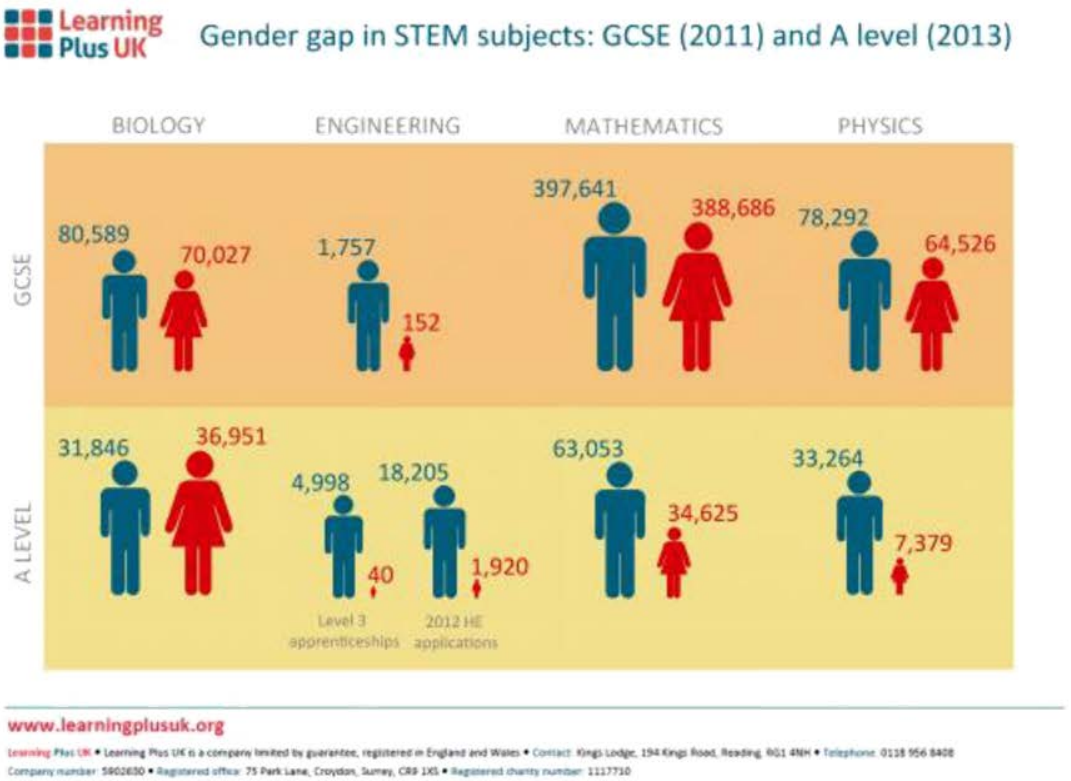


Key Reasons

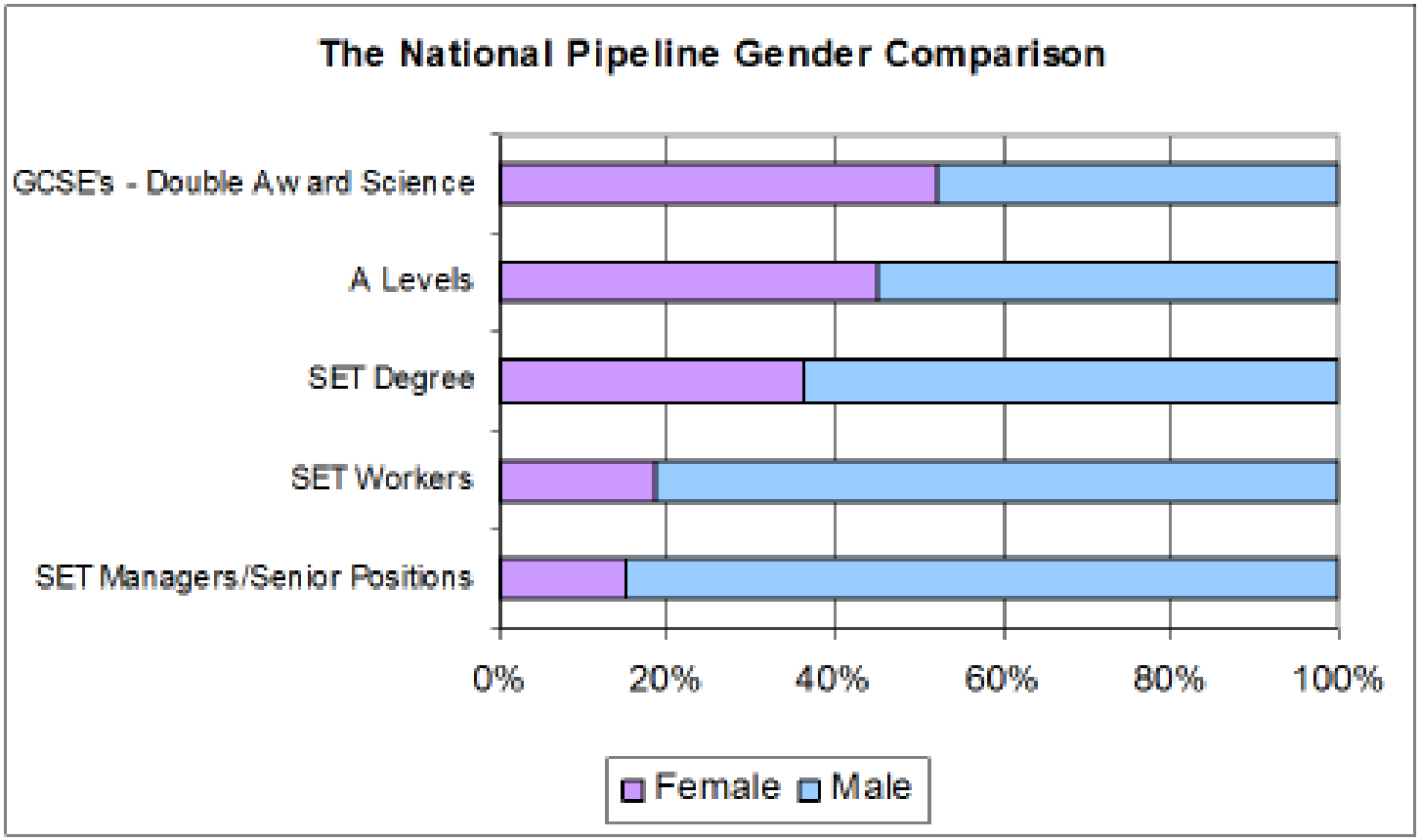
- Relative Lack of participation in certain STEM, education and career

- Dropping out at every stages, the ‘STEM Leaky Pipeline’ metaphor

Gender Gap in STEM subjects



STEM Leaky Pipeline in the UK (Wynarczyk, 2014)



Despite positive forces and some progress

- Greater participation in the labour market
- Equal access to education
- Equal opportunity policies and discrimination acts
- Emergence of new 'high-tech' industries
- Government and university funded positive action measures
- Work life balance policies and legislations
- Opportunities for R&D collaboration and exchange of knowledge and Ideas through open innovation

Negative forces Persist

Personal, professional and institutional barriers

- Culture of the scientific enquires and scientific departments
- Work-life balance
- Stereotyping
- Institutional sexism
- Male dominated rich formal and informal networks
- Lack of self esteem, confidence and self efficacy
- lack of access to female role models and mentors
- Lack of general interests in science
- Negative statistics and media coverage
- Image of scientists

Above all, the process of gender differentiation begins at early age, by five, children have adopted normative stereotypical beliefs about what constitutes men's and women's work.

Girls and Boys future career aspiration at the age of 10 (source, Wynarczyk, 2014)

Under-representation or invisibility

'Negative statistics and gender imbalance 'headlines' captured in current statistics and the media mask the excellent contributions already being made by women to technological advancement throughout the history' (Wynarczyk, 2014)

Under-representation or invisibility

- There is too much policy and research focus on under representation of women in science and innovation
- The current policy and research tend to focus on barriers
- There is need to focus on success stories
- Under the current innovation climate, it is not possible to examine the real impact of women to innovation capacity
- It is not sufficient to simply compare the contribution to innovation by men and women in terms of numbers not impact

Questions for Panel Discussion

1. Entrepreneurship is Entrepreneurship: Should we pay specific attention to women at all and if so, why? If only few women have entrepreneurial intentions and specifically intentions to grow or internationalize their business, shouldn't we accept this fact? Why should we care? Do we need to motivate more women to engage into entrepreneurial activities? Why?

Questions for Panel Discussion

2. Growth is a choice which is personal and strategic – Can and should this be influenced? If so, how? Should we aim for more growth at all (see e.g. the Triple Bottom Line approach which claims for the integration of social, environmental (or ecological) and financial value)? Do we need a new approach to firm performance? (If not,) how can the potentials of women entrepreneurs best be translated into ideas that are truly high growth and scale-able?

Questions for Panel Discussion

3. What is the relative contribution of the entrepreneurship ecosystem (macro level), the firm (meso level) and individuals and dynamics (micro level) to successful women's entrepreneurship?

Questions for panel discussion

4. Women are considered as a vital source for advancement of S&T and innovation so why they continue to remain an 'untapped pool of talent'? What are the opportunities and challenges, brought about by globalization, for example, climate change? Are there any solutions to key contributing factors to gender divide, for example, access to: finance, role models and mentors, informal and formal networks, market, business support, education and training?

Questions for the Panel

5. What are the key roles of HEIs technology transfer officers and commercialization policies in enhancing women's participation in the creation of university spinoffs?

Questions for Panel Discussion

6. Are there any examples of good practice in education system, university, industry, and government that can be identified and replicated elsewhere in order to promote and enhance greater participation of women in S&T-based ventures and commercialisation, hence internationalization in the knowledge-based, developing and emerging economies around the globe

Female Entrepreneurship and Female Owned SMEs

Panel Session 3

15th International Entrepreneurship Forum (IEF) Conference: The Globalisation and Internationalisation of SMEs and New Ventures
Venice, Italy, 14-16th December 2016

Do we need to motivate more women to engage into entrepreneurial activities? Why?

- Women's intellectual potential and contribution to Europe's competitiveness are not being maximised (EC Evaluation policy 2008)
- Tory Burch, a hugely successful woman entrepreneur, suggests that bringing more women into entrepreneurship could increase global income per person by 20% by 2030!?
- Increase global income per person
- Kauffman Foundation looked at businesses with female executives last year, and found that businesses with women have: A more nuanced view of risk; A greater chance of financial success; Greater creativity.
- women entrepreneurs see the world through a different lens and, in turn, do things differently. This is reflected in the kinds of businesses
  - gender-diverse business units have better financial outcomes than those dominated by one gender (Badal, 2014)

How can the potentials of women entrepreneurs best be translated into ideas that are truly high-growth and scalable?

- High-potential entrepreneurship = market-expanding, export-oriented and innovative – have most impact on economic growth
- Supporting female entrepreneurship requires attention to specific factors (Terjesen 2016)
- – the **entrepreneurial environment** (fear of failure is a major obstacle, FE are more educated, they need strong networks incl potential financiers, and socio-cultural support, e.g. childcare),
- **ecosystem** (support and training of founders strenghten skill development, active management of resources incl technology, existence of technology sectors and role models),
- **aspirations** (supported by systematic dev of new technology and entrepreneurial activity; access to finance).

What is the relative contribution of the entrepreneurship ecosystem to successful women's entrepreneurship?

- Networks, associations and other activities and services (e.g. financial and technology oriented resources and services) to support women entrepreneurship
- Density, fluidity, connectivity, and diversity, all need to be addressed in order to build a thriving entrepreneurial ecosystem (Kayffman Foundation). Barriers to women in entrepreneurial ecosystems require a systemic cultural shift. Without successful women entrepreneurs, vibrant ecosystems cannot exist.
- Women need role models who would motivate them to start companies.

What are the key roles of HEIs technology transfer officers and commercialisation policies in enhancing women's participation in the creation of university spinoffs?

- Conditions ensuring the contributions of spin-offs to innovation performance include: spin-offs' access to innovation finance (incl prototying), intellectual property rights regime, incentives to researchers for creating spin-offs rather than keeping their intellectual property off the market, effective technology transfer offices and university involvement;
- Promoting science-industry links and knowledge transfer from universities to private firms.
- Programs for female entrepreneurs should offer more opportunities to learn about starting and growing businesses and engage successful women business owners in mentoring.

Good practice in university that promote and enhance greater participation of women in high technology and scientific-based ventures?

- Currently, start-up courses are pravailing in curricula of universities. In addition a stronger focus should be on specialised courses, e.g. technology entrepreneurship and commercialisation of science, etc…
- To strenghten the cooperation btw university and enterprises inviting entrepreneurs as advisors and mentors in the process of business idea development and commersialisation of new products and technologies
- To enhance the cooperation btw university, primary schools and gymnasium to introduce the technology based specialities (special spaces/ laboratories) (Example of TUT)

Estonia

- Estonian Association of Women Entrepreneurs (since 2002)
- Estonian Women's Cooperation Chain (Naiste Koostöökett)
- Estonian Women Research and information Centre (Eesti Naisuurimus- ja Teabekeskus - ENUT) (since 1996)
- Positive on entrepreneurship in Estonia 92% all population (Denmark 97%, France 73%, Bulgaria 51%) (Amway Global Entrepreneurship Report 2015)
- Why entrepreneurship?: independence F52% (M57), self-fulfillment F49%(M42), second income prospects F42% (M39)
- Fear to fail is an obstacle to start a business: Women Est-59%; (Latvia 65%; Poland – 71; Netherlands – 36%).
- What do women fear: Est - financial burdens 43% (Germany 62%, Netherlands 20%), economic crisis 29%, legal consequences 17%, personal dissapointment 14%, unemployment 14%.

SME Policy Development

Chair: Giuseppe E. Gramigna
Chief Economist, US Small Business Administration, Washington, USA

Co-Chair: Prof. David Smallbone
Kingstone University, United Kingdom

Stuart Thompson
Policy Analyst, OECD LEED Programme (Venice Office), Italy

Dr. Thorsten Kliewe
Chairman, University Industry Innovation Network, The Netherlands

Samuli Rikama
Economist, Ministry of Economic Affairs and Employment of Finland

In our discussions on what to discuss for this panel, Prof. Smallbone shared one of his upcoming research where he raises several critical questions on the nature of government supported entrepreneurship programs.

Very eloquently, and indeed efficiently, he guides us through a sequential set of logically consistent, questions.

First raises the question of the basis or rationale for government supported entrepreneurship programs. Through this question Prof. Smallbone invites (or more likely prods) us to think about the broader question of the government's role in the economy and indeed society. He hints that government interventions should be based on identified "need" emanating from identified market failures.

He then guides us through some of the more difficult challenges with these types of government supported programs.

Prof. Smallbone highlights the critical and nearly ubiquitous challenge of lack of evidence of the effectiveness of entrepreneurial programs.

In addition, he points to three additional critical but common challenges with these types of government supported programs:

(1) Deficient program design where policy makers or program designers fail to consider current needs'

(2) Deficient program implementation where the program delivery mechanisms are poorly aligned with current needs or target populations or even with stated policy objectives;

(3) Program fragmentation where over time, a multitude of fragmented, uncoordinated, and often small programs are introduced across different government entities. In this environment, no program reaches sufficient size or scope to generate enough data for learning what works or what does not. I would also add that all too often these fragmented programs are artificially maintained thus propagating a static state where nothing is learned, and nothing is changed

Finally, Prof. Smallbone invites us to consider some relevant future research topics, something of great importance for all of us involved in the entrepreneurship and SME space.

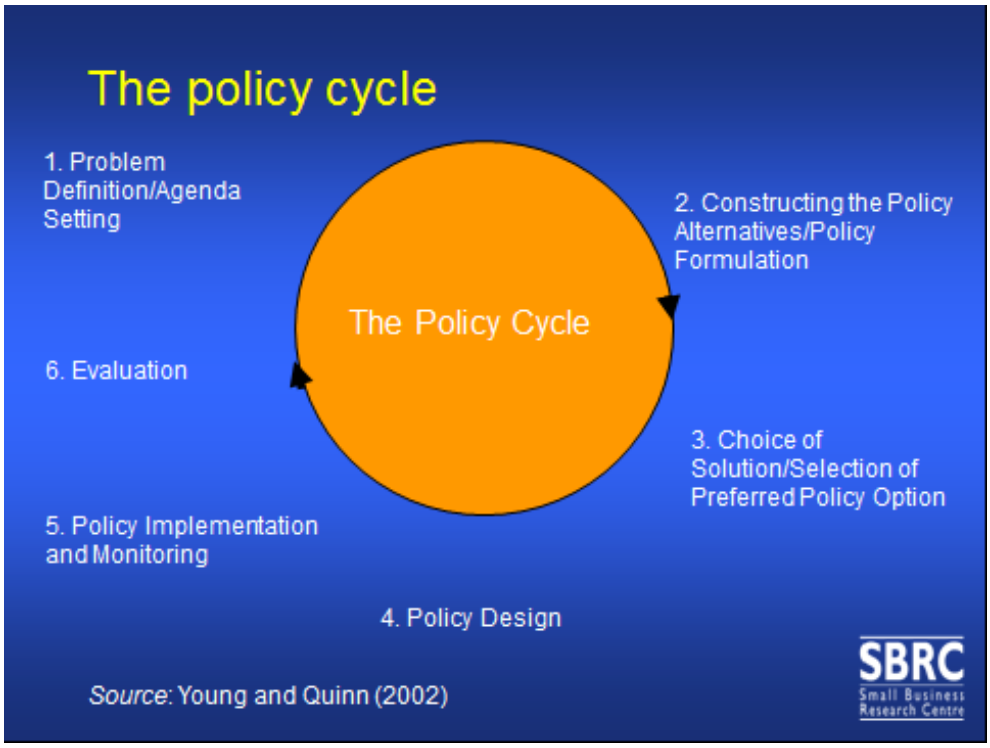
He outlines the need to further research on:

(1) "***Policy Formulations***" , which I understand to include ***Policy and Program Design*** and ***Program Implementation***, with a specific focus on the role of ministers, senior advisors and civil servants;

He also invites us to consider

(2) The need for further research on the cost and benefits of government supported entrepreneurship programs.

Finally he provides us with a robust analytical tool to undertake these empirical and analytical policy-oriented research tasks: A six-stage Policy Cycle.



In essence it is an analytical tool to learn what works and what does not with two critical features:

(1) It incorporates data into the learning-development-more-learning-adaptation process; and

More importantly,

(2) It can be considered a continuous, dialectical process of continuous learning, and adaption.

This analytical tool or process is particularly applicable to some recently improved/expanded empirical modalities for ***Evidence-Based Policymaking***, a topic I have been developing within the U.S. Federal government as the chair of a workgroup charged with developing a user guide for the *Evaluation of Business and Technical Assistance Programs* (EBTAP).

The value proposition of this approach is as follows:

> *During the past 10-15 years we have observed how **Big Data** has changed the paradigm of how the private sector delivers its goods and services to its clients. Likewise, the adroit use of **Program Administrative Data (PAD)** which is collected as part of the normal delivery of government services, and already residing within government databases; and when linked to other datasets already residing across other government entities and possibly to private sector datasets can change the cost and empirical paradigm of how the government learns what works and what does not within government. As such this approach can produce the foundation of **Evidence-Based Policymaking**.*

To give you an example of this paradigm shift, a national-level study based on a survey modality with an expected cost of $ 50 Million was implemented for about $500,000 using PAD.

A description of the essential elements of this modality will illustrate that it provides potential solutions to the challenges raised by professor Smallbone. So here are some of the requirements, and basic characteristics of this ***Empirical Modality***:

1. Prof. Smallbone hinted that the efficiency and effectiveness of any entrepreneurial program is based on an enabling entrepreneurial ecosystem. Likewise, the efficiency, effectiveness and indeed the possibility of implementing a program evaluation based micro-level *Program Administrative Data* that is linked to other datasets is based on the existence of a robust data-sharing infrastructure of laws and technologies that includes laws and procedures on (1) ***Privacy*** that outline which data is collected, (2) ***Confidentiality*** that outline the allowable users and uses these data, and ***Security***, that outline the excluded users and uses of these data.

Any effort that gets anyone of these three critical elements wrong will fail on its own weight, measured by the quality and quantity of the data collected, stored and used.

Within this robust data-sharing infrastructure, this modality requires several program specific elements (all of which have been highlighted by professor Smallbone):

(1) A set of clearly defined **program objectives** and targeted recipients.
(2) A set of clearly defined theories of how the program is expected to affect change. This ***Theory of Change***, would outline the logical and transmission mechanisms from program:
   a. ***Inputs***: (funds, or resources or materials used by the program to provide its services);
   b. ***Activities***: Services provided by the program.
   c. ***Outputs***: Quantifiable amount of service provided (e.g., classes attended, people served, number of hours of services received, financing, etc.).
   d. ***Outcomes/Impacts***: Any behavioral or other change occurring as a result of receiving these services. Note: this change is usually measured at the individual recipient level, but can include broader regional or economy wide impacts.

Tracing and measuring these elements will require that the program collect certain data for each service delivery, i.e. ***transactional-level data*** of each service delivered. These *Data Items* include information on the:

(1) Service Provider (who);
(2) Service Provided (type, intensity, time, location);

(3) Service Recipient Characteristics (*Individual* age, gender, education, *firm* age, size, sector, etc.);

(4) Service Recipient Identifiers, including ***Unique Identifier*** codes (fiscal codes), as well as ***Supplemental Identifiers*** (Names, Addresses, telephone numbers, web and e-mail addresses, etc.)

With these micro-level Program Administrative Data (PAD) researchers will be able to observe and estimate the degree of program ***effectiveness*** (e.g. measure the effectiveness in delivering its services via different types of training, by different types of trainers, to different types of entrepreneurs, and in accordance with stated policy objectives).

Linking these Program Administrative Data (PAD) to other datasets across government ministries and possibly across the private sector will allow observing and estimating behavioral change (**the Program Impacts**) such as employment, revenues, profits, market expansion, business dynamics (births, deaths…) of not only the program recipients but also of a comparison group. The difference in behavioral changes between these two groups could be deemed to be an empirically robust estimate of impacts **attributable to the program**. Of course, one could implement a similar modality to estimate and attribute the impacts of a number of programs.

There are several ***Analytical Modalities*** that were established in the natural sciences around the 1800, and discussed in the social sciences but were deemed unfeasible for the social science realm due to lack of data and ethical issues. However, recent technological advancements makes these empirically-robust analyses practical and cost effective. Of course there are many here unstated questions, which we hope to briefly discuss during the question and answer part of this panel.

Questions

1. Address the challenges and opportunities of (a) finding no evidence of impact, (b) finding evidence of no or insufficient impact, or (c) ineffectively achieved impacts.

Answer themes:

a) Finding no evidence of impact leaves the researcher with the hard task of explaining that not finding evidence of impact does not support the conclusion that the program had in fact no impact. This is often an erroneous conclusion of novice evaluators and policy makers. It could be that the program was too small or too brief or too recent to generate any detectable impact. This is often referred to as the challenge in "*finding a needle in a haystack*": The probability of finding the needle is dependent on several factors: (i) The size of the needle (the treatment intensity), (ii) the size of the barn (the nature of the market gap or need), (iii) the number of times one looks for the needle (the sample size).

b) Finding evidence of no or unsufficient impact that is inappropriately provided to a novice policy maker may result in an "*up or down*" vote on the program, instead of a learning exercise of what could be changed to obtain sufficient impact.

c) Ibid for finding of inefficiently achieved impacts.

2. Address the challenges of using the Program Administrative Data (PAD) process to evaluate and learn from young, small, or recently implemented Pilot Programs.

Answer themes:
The PAD process is based on the existence of fairly large number of observations. There are significant limitations with implementing the PAD process for relatively small datasets. For example, one may not obtained sufficient number of matched observations. Perhaps, more importantly one must take great care when interpreting the "informational value" of these evaluations with limited number of observations. For example, they may only provide preliminary, weak evidence of effectiveness and impact for the specific program evaluated (AKA weak, preliminary and limited ***Internal Validity***). However, even this preliminary data is better for than no data. Finally, one must take great care not to extend these weak Internal Validities to other programs or environments. That is, there is little to no ***External Validity*** valued to be extracted by these weak studies.

3. Address the challenges of the long gestation timeframe for implementing Program Administrative Data (PAD) process.

Answer themes:

a) Use Performance Measurements that are observable in shorter-time frames to evaluate the effectiveness and possibly temporarily justify the program;

b) Leverage a well-developed data-sharing infrastructure with specific government and private sector entities to implement rapid-cycle evaluations.

Stuart Thompson
Policy Analyst, OECD LEED Programme (Venice Office), Italy

My background prior to OECD was as an economic development consultant, frequently doing evaluations of programmes so my feelings about David's paper are no doubt coloured by this.

Reading the paper prompts the following areas to talk about, related to evaluation and the evidence base.

SME Policy objectives are very difficult to formulate, particularly at a top level. While not trying to underestimate the difficulties in other areas, generally the title makes it obvious what priorities should be: health policy is about keeping people healthy, transport policy is about better and faster transport. But what is SME policy about? Do we really want more SMEs (Greece has more SMEs than Switzerland, is this a good thing?)? What is magically different about the 250th employee (many EU documents seem to give the impression that the world changes at this point)?

I think the way in which politics interacts with policy choices is also worth exploring. Politicians like to be able to be photographed planting a tree, so incubators are more of a priority than reform of regulations even if the latter is cheaper and probably has wider impact. Guarantee schemes are favoured because they appear to be somehow market based (seen as good), even when some schemes would be more effective reframed as loan or grant schemes (seen as bad because they are market intervention).

On evaluation, I think an important area which is not well explored is the quality of the people running programmes and projects. In private sector investment, what is the most important factor – well, it's management, management and management. But we tend to believe that we can mainstream pilot projects without considering that the original may well have worked particularly well because of the individuals involved. The process of designing and evaluating pilots before moving to the mainstream is anyway often not thought through.

While it's fortunately becoming less common, I think that the issue of how to evaluate programmes where evaluation was not in the design is worth considering. Often policy-makers have to make decisions without full impact evaluations or evidence of what works in a direct way. How should we deal with non-evidence-based policy? (or suggestive-results-based policy?)

On the wider themes of the conference related to internationalisation I am also interested in the following:

How do very small enterprises internationalise? My anecdotal observation is that this is very often strongly coloured by personal contacts and cultural affinity, rather than any rational decision based on market opportunities and economic benefit. How should we react to this? Should we look to challenge this and make people more "rational" – which is generally what public policy tries to do, or should we support this model of working and seek to make it work better (for example programmes related to the diaspora)?

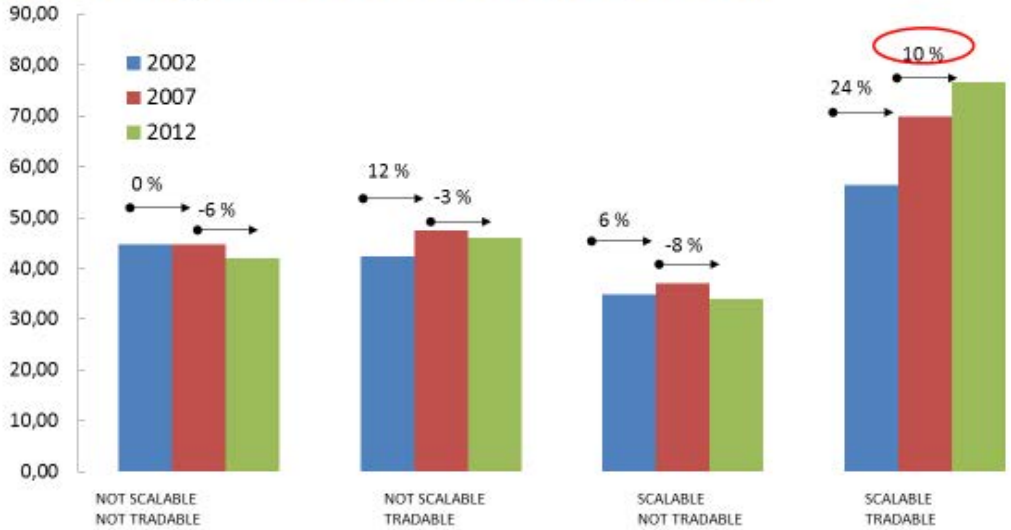
How does digitalisation change policy? There's a lot of discussion about how digitalisation helps SMEs to internationalise more easily, but much less about how it changes what policy support is needed. The internet makes it much easier to find information on foreign countries and even to get it in an understandable form (on a good day with Google Translate). Does this affect the types of actions or priorities that public institutions should support? This, by the way, also reflects some of my experience of evaluation. People trying to reject the results of evaluations have various different approaches, but one of the most difficult to counter is one which say: well, maybe it didn't work then, but the background has changed so maybe it will work now. Is digitalisation sufficient reason to revisit policies which didn't work in the past?

Samuli Rikama
Economist, Ministry of Economic Affairs and Employment of Finland

Number of service enterprises

Scalable \ Tradable	No	Yes	
Yes	83 014	42 168	64 %
No	58 877	12 504	36 %
	72 %	28 %	

Productivity as value added per person



Cities and SMEs

Chair: Prof. Piero Formica
Innovation Value Institute, Maynooth University, Ireland

Co-Chair: John Edmondson
Editor, Industry and Higher Education Journal

Prof. Satyajit Majumdar
Tata Institute of Social Sciences, India

CITY, SMALL AND MEDIUM-SIZED ENTERPRISES, AND TRANSFORMATIVE STARTUPS

Stepping forward into the Renaissance City of the 21st Century

By Piero Formica[1]

The city is a mental clock whose hours strike at the time of the pendulum swinging between the tradition of its small and medium-sized enterprises and innovation made by the "useful monsters" – namely, the transformative start-ups. The pace of the city reflects its alternative movement between the camp that sets the stage for incremental improvements and the camp that sets in motion a process of thinking in unconventional ways and that comes up with heterodox ideas and proceeds in unexplored directions – those undertaken by the transformative start-ups which change the state-of-the-art, leading up to the Renaissance city of the 21st century.

The city of small and medium-sized enterprises

It is cultural the tie between the city and its small and medium-sized enterprises (SMEs). The vocations of its territory give the city a distinctive imprint. SMEs are the result of those vocations. SMEs make them own by reinforcing and replicating their distinguishing features. Thus, a virtuous circle is triggered between the city and its SMEs. The one and the others are successful. However, are the good and the excellent results achieved over time sustainable and durable?

An answer comes from Italy, favoured homeland of artisans, technicians and workers who from the lifeblood of vocations in their community have extracted the elements rich of active ingredients with strong entrepreneurial properties. They were the founders of a myriad of business ventures deployed in the cities of north-eastern Italy: companies that have largely retained the minor size and the configuration of *ortus conclusus* (i.e., enclosed, walled garden) typical of those urban communities.

Venice is a case for the books. The naval vocation of that prestigious and powerful maritime republic, as is evident in the eyes of those who visit its Arsenal, nurtured creativity and spurred innovation and entrepreneurship in the construction of the galleys. Later, Venetians tested their galeasses (galleons evolved from oar-driven galleys) in the waters of the Gulf of Patras. These galeasses were different from traditional galleys: they carried large-calibre cannons. However, following the battle of Lepanto, it was not the Venetian Arsenal that led the race to innovate. Situated as Venice is, overlooking the shores of the Mare Nostrum, Alessandro Barbero, Professor of Medieval History at the University of Eastern

[1] Professor Formica is Founder of the International Entrepreneurship Academy and a Senior Research Fellow of the Innovational Value Institute at the Maynooth University in Ireland where he leads an international research team on experimentation and simulation of high-expectation start-ups.

Piemonte, notes that the galley remained for a long time the favourite vessel of Venetian navigators. Venice was crowned with enormous success and fame. It was the discovery of America by Christopher Columbus that triggered the process of decline.

Initially comfortable in his *ortus conclusus*, from that time on the location of Venice was disadvantaged. The creative destruction represented by the galleon was to be exploited in full by the countries of the Atlantic coast, including Spain, allied to Venice at the time of Lepanto. To innovate, you have to be in the right place at the right time. Venice was disadvantaged, because of its geographical location at the northern extremity of the Adriatic Sea, with respect to the new trading routes. Many years were to pass before the sun would be seen setting on shipping traffic on the Venetian horizon, but at that moment the die of the lagoon city was cast.[2]

The case of Venice is one of many demonstrating the appeal of an irresistible territorial vocation – which has the force of the foot decidedly pressed on the accelerator of efficiency. The glue that binds together vocational competencies and a high degree of specialization holds the city and its SMEs together. Experts who follow the vocational journey by consulting the mastered knowledge maps populate the local community with its SMEs. Innovation is incremental along the direction of doing things right that leads to do better what we already are able to do.

In Bologna, mental associations caused by a strong vocation for mechanics showed the way forward, passing from the sophisticated pre-industrial machines for processing silk to today's cutting-edge machines and systems for automatic packaging. In the sign of efficiency, the Bolognese "Packaging Valley" is another case of success achieved thanks to a perfect match between the city and its vocational SMEs whose creativity stems from the accumulation of experience along the directional vectors for incremental innovation.

Specific Features of the Couple City-SME

EFFICIENCY
- DOING THINGS RIGHT
- THINK +10%

BUSINESS PLAN in order to count the **RISK**

EXPERTS
- Who master KNOWLEDGE MAPS
- Who KNOW THEY D0N'T KNOW
- Who are PATH FINDERS
- Whose concerns are TECHNIQUE-DRIVEN within their realm of expertise ('silo thinking')

In cities with high-intensity spontaneous socialization, the local vocations are a fertile ground for prestigious achievements. In Bologna, already in the twenties of the twentieth century, coffee, tobacco and card games would be the three key ingredients of socialization between ordinary working people, whatever their employment. More so than with current academic and professional conferences, with their rituals of exchanging business cards, the ritual of drinking coffee while playing cards in city bars gave rise to informal relationships amongst different people, often with unexpected results. In just such bars in

[2] See Piero Formica, *STORIES OF INNOVATION FOR THE MILLENNIAL GENERATION. The Lynceus Long View*, Palgrave Macmillan, 2013

Bologna, general and specialist employees first developed and then launched packaging machines that would eventually reach global markets.[3]

Spontaneous socialization: from the 'bottegas' of Renaissance Florence to the co-working[4] of knowledge city

Co-working spaces are on the rise, from Google's "Campus" in London to NextSpace in California. Much has been made of these shared workspaces as a brand-new idea, one that barely existed 10 years ago. But the way they function reminds me of a very old idea:

The Renaissance 'bottega' (workshop) of 15th-century Florence, in which master artists were committed to teaching new artists, talents were nurtured, new techniques were at work, and new artistic forms came to light with artists competing among themselves but also working together.

The Renaissance put knowledge at the heart of value creation, which took place in the workshops of these artisans, craftsmen, and artists. There they met and worked with painters, sculptors, and other artists; architects, mathematicians, engineers, anatomists, and other scientists; and rich merchants who were patrons. All of them gave form and life to Renaissance communities, generating aesthetic and expressive as well as social and economic values. The result was entrepreneurship that conceived revolutionary ways of working, of designing and delivering products and services, and even of seeing the world.

Florentine workshops were communities of creativity and innovation where dreams, passions, and projects could intertwine. The apprentices, workers, artisans, engineers, budding artists, and guest artists were interdependent yet independent, their disparate efforts loosely coordinated by a renowned artist at the center — the "Master." But while he might help spot new talent, broker connections, and mentor younger artists, the Master did not define others' work.

For example, Andrea del Verrocchio (1435–1488) was a sculptor, painter, and goldsmith, but his pupils weren't limited to following his preferred pursuits. In his workshop, younger artists might pursue engineering, architecture, or various business or scientific ventures. Verrocchio's workshop gave free rein to a new generation of entrepreneurial artists — eclectic characters such as Leonardo da Vinci (1452–1519), Sandro Botticelli (1445–1510), Pietro Perugino (c. 1450–1523), and Domenico Ghirlandaio (1449–1494).

What can those who want to create more innovative and collaborative workplaces today — whether that's a better office in a traditional organization, a co-working space, a startup incubator, or a fab lab — learn from the workshops of the Renaissance? The bottegas' three major selling points were turning ideas into action, fostering dialogue, and facilitating the convergence of art and science:

Turning ideas into action. Renaissance workshops were not just a breeding ground for new ideas; they helped ideas become reality. Likewise, today's innovative workplaces need to be equipped with everything people need to turn their insights, inspirations, and mental representations into new products and ventures. Coming up with new ideas is hard enough, but the real challenge for many organizations is figuring out how to exploit them and turn a profit.

Fostering dialogue. Ferdinando Galiani, a Neapolitan economist of the 18th century, argued that markets are conversations. The quality of the network — that is, the combined intelligence of people and organizations with different skills and abilities — plays a critical role in innovation.

In Renaissance workshops, specialists communicated with each other consistently and fluidly, facilitating

[3] See Formica 2013, quoted in footnote 2.

[4] This section was originally published on Harvard Business Review, April 27, 2016: "The Innovative Coworking Space of 15th-Century Italy", by Piero Formica.

mutual understanding. The coexistence of and collision among these diverse talents helped make the workshops lively places where dialogue allowed conflicts to flourish in a constructive way. The clash and confrontation of opposing views removed cognitive boundaries, mitigated errors, and helped artists question truths taken for granted.

Today, we often recognize the need for these kinds of illuminating conversations without really making space for them in our organizations, either because organizations are too afraid of conflict or because people are simply too busy to try to expand their understanding of each other. But Renaissance workshops offer proof of how important it is for collaborative workplaces to draw on sources of opposing ideas and controversial opinions.

Facilitating the convergence of art and science. While often remembered as primarily artistic today, in truth the Renaissance workshop was trans-disciplinary. This helped create a holistic approach to creativity, which stands in opposition to our own organizations, in which people in different specialties are often separated into silos.

For example, during the Renaissance nature was seen as a convergence of art and science, as in the famous “Vitruvian Man” drawing by da Vinci. Many of today’s most exciting business opportunities are similar meetings of technological advances and aesthetic beauty. Bringing these disciplines together fosters mutual learning through experiments that lead to business opportunities.

Whether you are running a co-working space or trying to get your own organization to be more creative and collaborative, think about some of the ways you might follow the example of a Renaissance workshop.

The city of transformative start-ups

In the entrepreneurial field of the SME city, people grow ideas associated with the vocations of the territory. Beyond the margins of the *ortus conclusus*, there's the no man's land without any associative barriers and, therefore, a fertile land for ideas which, if entrepreneurially exploited, can change the socio-economic fabric of the city so as to transform it. For citizens, workers, local businesses and policymakers who live and work in the field of vocations, transformative start-ups appear in the resemblance of monsters that, in fact, intervene to change the shape of the city.

Not to be caught up by surprise and awe at the sight of monsters, the city is challenged to look at the future with new eyes. There is to think about a future in different ways than the past with its deep-rooted vocations. A future that is unfathomable, ambiguous, and open to every option. The business is no longer constrained by associative borders and the business success depends from working outside the garden surrounded by high walls, at the intersection of sectors, markets, and generations culturally distinct and distant.

Stepping on the accelerator of incremental innovation that does raise the efficiency no longer gives the expected results. City and its SMEs have to switch from doing things right and getting better to do the right things. In short, not the incrementalism but a change of the-state-of-the-art – "change gear, by inserting that of the effectiveness", we would say by resorting to an automotive metaphor – that jeopardises vocations for so long grown. It is precisely those monsters, which turn out to be useful with their way of thinking, that advocate for divergent and heterodox ideas. In line with this reasoning, they walk entrepreneurial paths never explored before.

To ensure effectiveness, it is no longer central the role of experts endowed with detailed knowledge maps. The central figure is the creative ignorant[5], who arises abstruse questions, conscious of ‘not knowing of not knowing’. It is her action that triggers the entrepreneurial process of those start-ups that

[5] See Piero Formica, *THE ROLE OF CREATIVE IGNORANCE. Profile of Pathfinders and Path Creators,* Palgrave Macmillan, 2014

are agents able to transform the economic and social fabric of the city. If the SME is such for its size (turnover, employees, and balance sheet) circumscribed by the long habit to operate within the *ortus conclusus*, the transformative start-up does not fall into that measurement scale having as its underlying principle the exploitation of space with no borders, and its focus on cross-sectoral relations and cross-cultural networks of people and businesses of the most varied backgrounds.

Specific Features of the Couple City-Transformative Startups

EFFECTIVENESS

- DOING THE RIGHT THINGS,
- THINK 10X, NOT 10%,

BUSINESS MODELS in a climate of **UNCERTAINTY**

NON-EXPERTS

- Who are CREATIVE IGNORANT
- Who D0N'T KNOW THEY DON'T KNOW
- Who are PATH CREATORS, unrestricted by the corset of knowledge
- Whose concerns are BEHAVIOUR-DRIVEN in order to interact appropriately with those who are different from oneself in extraction, culture, discipline, and character

If the city-SMEs pair brings us back to the world divided into sovereign nation-states, with the emergence of transformative start-ups the architecture of international relations changes. Protagonists are no more the states, but the cities embarked on a journey of entrepreneurship unconstrained by local vocations, conventional cultural, and political and geographical barriers. Indeed, findings from studies of entrepreneurship in different cultural contexts indicate that there are common values shared by entrepreneurs despite the diversity of their roots.

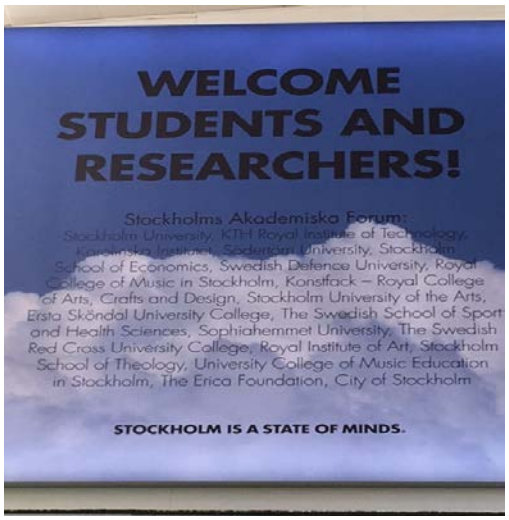
In Tel Aviv, the trans-disciplinary research programmes make global start-ups flourish. A major asset of Bangalore is the cultural interaction between industry and scientists.

Source: Compass, The 2015 Global Startup Ecosystem Ranking

In Stockholm, culture, productivity and economic growth go hand in hand. In the airport of the

Swedish capital, the poster reproduced here says that that city is a state of mind, an attitude of the soul. That poster is a vivid image of a critical mass in the cultural field as well as of the team spirit, with players participating in the international talent circuit. In short, a widespread culture made up of open boundaries, education without borders, new connections, physical and virtual journeys into other places and disciplines.

As observed by Leif Edvinssson, pioneer of studies on intellectual capital, in a forthcoming book edited by the writer (Piero Formica, Entrepreneurial Renaissance: Cities Striving Towards an Era of Renaissance and Revival, Springer, New York), the city of culture it is an open space where each of us may harbour aspirations and engage in personal and collective projects in a climate of dynamism, harmony and creativity. From this perspective, the city could be compared to a super brain, as it emerged from research conducted by Debra Amidon and Bryan Davis on "Knowledge Innovation Zones" (http://www.inthekzone.com/kIZ-triplelens.shtml).



Source: http://www.studyinstockholm.se/stockholm/stockholm-is-a-state-of-minds/

Cities that draw on the discoveries, inventions and innovations to generate transformative entrepreneurship revive the lesson imparted by the clubs and informal learning societies like the Lunar Society of Birmingham and the Honest Whigs in London. Their members were the 18th century scientific and industrial revolutionaries who in England opened up that path which then became known as "industrial revolution". That variously articulated revolutionary body – were among them scientists, inventors, entrepreneurs, craftsmen, artists, and politicians – shared ideas in a completely transparent manner because free from monetary incentives that drive forward the formation of vested interests. The flow of ideas in motion and the consequent influence they exerted on the society of their time acted as a multiplier of productivity and growth.

Give full credit to the useful monsters

Transformative start-ups are useful monsters since they offer the city the right motivation to seize the emerging opportunities. The interaction between technological changes and new patterns of behaviour is the source of entrepreneurial phenomena that deeply affect the life of the city. E-commerce, drones, electric self-driving cars are examples of transformations in space and time of both logistics and urban mobility. Long chains of professions that have marked the working life of the city come into irreversible crisis.

One need only think to the growing number of people who will combine the mobility no longer with the ownership of a car, but with the demand for a transport service. To move from one place to another, one

can book in real time the service of a self-driving the car. This will produce an upheaval in the activity heretofore performed by car dealers. To survive, they will have to transform into service providers by establishing close relationships with software vendors and maintenance technicians of the new infrastructures that allow those cars to circulate in the city.

Workshops for electrical repairs, tyre service centres, vehicle service centre and body shop, service stations, car washes, and garages: all have their activities turned upside-down. Equally heavy are the transformations that invest car insurances and the business chain for the issue of driving licenses. With fewer owners and car drivers, demand for driving licenses will drop, whereas alternative forms for the identification of persons on board of the new vehicles will come to light. It will also drop significantly the demand for taxi and lorry drivers.

What about the traffic police when the municipalities will lose revenue from fines and tolls? They must resort to new taxes to instruct the traffic policemen to perform the tasks required by that innovation. Meanwhile, multiple opportunities to work will spring forth since, as in the case of travelling by train and plane, car drivers together with passengers can eat, read, watch videos, and download to mobile phone programmes available on the Internet.

The beauty of the ideas that change the world is in the circuit of energy they trigger. When Henry Ford opened up the pathway of the car industry, all activities related to the horse-drawn carriages were swept. Has no future the self-driving car? There is no lightness of touch that will allay the fears of many a traditionalist. In the same vein of them, on June 22, 1902 the New York Times stated "no future" when Henry Ford showed the world its novelty. Cities that will recognize and appreciate the useful monsters will not make the same mistake.

To round it all off: the Renaissance cities of the twenty-first century

The name of the future of cities is "Transformative Entrepreneurship" to which "Renaissance" should be added. The ‘Cambrian explosion’ of entrepreneurship is a phenomenon akin to that which gave rise to the Renaissance with its culture which spread far beyond its own traditional borders – the monasteries.

Supported by digital technologies that create the infrastructure of ‘knowledgefication’ whose force of transmission is comparable to that of the electricity networks of the early twentieth century, the growing power of the human mind voluntarily builds its future using mental gymnastics to manage the uncertainties, being unable to predict what tomorrow will bring.

In the Renaissance cities of the twenty-first century, urged by technology to run swiftly, the younger generations abandon the heavy burden of knowledge maps entitled ‘twentieth century’ to travel with the light luggage of ‘creative ignorance’ along multi- directional paths. The creative ignorance learning is a journey that starts when you turn off the light of the day that is the certainty, advancing in the dark night of unmeasurable uncertainty. What will happen along the way towards the future, you will discover en route, as part of the redoing and inventing processes. Living in the certainty of uncertainty, creative ignorant face, looking ahead, the unpredictable. That's how new paths are made (not found!) by walking – previously unknown paths in science, art and culture, and, not least, in entrepreneurship that draws nourishment from them. That is precisely what marked the Renaissance Age.

These are the knowledge nomads whose actions help overcome cultural and not only geographical distances, as well as the chasm between researchers and entrepreneurs. As evidenced by the fourteen thousand students of 38 higher education institutions of Hangzhou that in just one year, 2014, privately financed have gone to swell the ranks of the 21st- century wandering students, we live now in a time when the great migrations combined with the international mobility of the knowledge nomads envisage a future in pursuit of the primacy of the cities where the majority of the world population will be concentrate by 2050.

The first half of the current century is an accelerated rush of population to the cities. In the age of worldwide mobility, runners are the talents attracted by the research centres and laboratories of

Academia and Industry very present in the cities, as well as by the opportunities to exploit the results of their investigations offered by multiple connections among the many leading protagonists crowding the city. But not only the talents flock in large number to cities. The movement is far broader, investing the most different layers of a world population looking for opportunities that take shape in the cities as places of design and implementation of innovative approaches in social and economic fields. What really meets the needs of old and new citizens is the entrepreneurial culture that arises from the adoption of a behaviour that provides effective answers to scientific, technological and human advancements, and to their manifold liaisons. This culture is synonymous with a new life, of a Renaissance, which gives a unique conceptual imprint to each city.

From education to science and entrepreneurship, the intangible factors of innovation are the central engine of that human change that is the Renaissance. In the cities of a new entrepreneurial Renaissance, the frontier of human knowledge is dynamic, always moves forward. The government of ideas springing from human creativity – the "ideocracy" – generates projects that create a demand for knowledge-based activities: from the intuitive knowledge to that along the two directions of induction and deduction. The common weal – and therefore the prosperity of the community – is the goal to achieve according to a holistic and organic view of the city.

Just as happened to some extent with the printing press in the Gutenberg era, ideas and contents leveraging on digital technologies acquire that commercial value which in the industrial age had been only assigned to material goods. Thus, in the Renaissance profile of the scientist one can glimpse increasingly pronounced the traits of the entrepreneur. To make growing the number of scientists who, setting up companies, are able to reconcile interest in research with entrepreneurship, it is necessary that a country be endowed with industrial research laboratories where scientists can combine thought with action.

Independent creators, who give rise to digital communities, sell their creations directly to customers in online markets – the result of mutual collaboration. ‘Creative Market’, founded in 2012 in San Francisco by Aaron Epstein, Chris Williams, and Darius A. Monsef IV, brought together about 9,000 independent creators (see https://creativemarket.com/about). As in the case with Francis Bacon (1561-1626), in the Renaissance cities the figure of the ‘scientific leader of the new industrialist’ imposes himself, relying heavily on science to manufacture different and higher quality products when compared to the industrial age. They also erupt on the scene 'political entrepreneurs' and 'public entrepreneurs' – characters whose names have been coined by Galal and De Haas[6]. The former channel their Renaissance vision in the direction of innovative strategies pursued by the latter – whether individuals or public sector organizations with the mission to increase the absorptive capacity of innovation.

Building upon these features, the whole body of entrepreneurship rises to new life with more entrepreneurs and creators of innovative businesses, which, bringing abundance, instill optimism in the cities that nurture them.

The pioneers and early followers of the digital age have accumulated fortunes that break down national, geographic, linguistic, and currency barriers. Along which roads will they be taking their fortunes? As in the Middle Ages, will it be their ambitions that dictate the rules of the game? Or, as happened in the Renaissance, will today’s the new wealthy lords show a willingness to encourage the mobility of social classes and individuals, in order to break the power of the overwhelming feudal hierarchy of the lords of giant enterprises?

Emerging Renaissance cities under the aegis of a vision focused on transformative entrepreneurship are a testing bed for policy makers and public administrators. Investing in the learning processes of ideation, fertilizing the soil for the emergence of political entrepreneurs and public entrepreneurs within the

[6] Galal, H. and de Haas, E. (2016), “The Role of Innovation in Developing Competitive Cities”, Cities Today, 15th February

meaning of the terms given by Galal and De Haas, positioning themselves at the crossroads of the circulation of knowledge nomads, making full use of multilinguists who bring together science and entrepreneurship, and pushing up the number of scientists who reconcile research and entrepreneurship: these are sensitive as well as vital tasks to be carried out for the purpose of the "City Renaissance in the Digital Age".

For further analyses according to the author's line of thought

Piero Formica (Editor), *Entrepreneurial Renaissance: Cities Striving Towards an Era of Renaissance and Revival*, Springer, Winter 2016-17

Introductory remarks, John Edmondson, panel session on 'Cities and SMEs'

In his book *Scum of the Earth*, his personal memoir of France at war published in 1941, Arthur Koestler tried to pin down what Paris meant to him. 'This town,' he wrote, 'has always been thought of by her lovers as a person alive – not metaphorically, but as a psychological reality.'

Many city dwellers perceive their city in some sense as a living organism. We call its main streets arteries. We speak of its heart, its energy, its pulse, even of its changing moods and of its spirit. Tellingly, the novelist and historian, and inveterate Londoner Peter Ackroyd called his 2001 book on London a 'biography', implicitly anthropomorphizing and individualizing the city. For those who live and work in them, each great city has its own distinct character or identity – distinct not only from other cities but, as some recent theorists have suggested, distinct too from the nation state of which it is nominally a part.

To begin to understand what gives a city its unique and organic life, we need to understand the role of its past, and of the interplay between that urban past and the urban present. And by a city's past I am not just referring to outstanding historical events, like the London Blitz or the French Revolution, but also to everything that has ever happened there, everything that has ever been written about it, every picture that has been painted of it, every photograph taken … Because the city is a constantly developing construct of spatial and temporal connections, a text that is always being written.

Writing in 1867, when much of Paris had been dramatically transformed by Haussmann, Victor Hugo, reading the city like a printed text, articulated this interplay between past and present. 'Today,' he wrote, 'old Paris can be distinctly seen, like an old text visible between the lines of the new.'

Around the corner from my office in the Bloomsbury area of London is a street of small shops – through a local initiative all the shopkeepers have stuck little blue signs in their windows that tell who was trading there a century or more ago. As you walk down the street you see that in the 1860s the Italian restaurant was a local bakery, in the 1840s the sandwich shop was a bootmakers, in the 1830s the mobile phone shop was a china warehouse, and so on. You walk down the street, you make connections, you walk through time as you walk through space.

If you stroll around the quays on the Ile St Louis in Paris, you pass by mansions that have stood there since the 1600s, one of them the house where Baudelaire, Balzac and Gautier smoked hashish in the bohemian Paris of the 1840s, and on your other side are bullet holes in the wall of the quay made by machine guns in the 1940s as the occupying German forces fought off the French Resistance. And if you glance across the river to the left bank you see the famous late 20th century building of l'Institut du Monde Arabe, the Institute of the Arab World, the building itself a dialogue in glass and aluminium between Western European and Islamic architecture and design. To borrow Walter Benjamin's words from his 'Arcades Project' in reference to the psychology of the flâneur, 'far-off times and places interpenetrate the landscape and the present moment'. In the city, in other words, we are constantly reminded of the never-ending encounters between past and present, between continuity and disruption, and these perpetual encounters give the city its edge, keep it constantly in motion and invite us to engage and respond.

Unless we're in Tokyo, we navigate the city – that is to say, we connect its spaces – by giving streets names. Street names echo. Cheapside, a major street in London's financial centre, echoes the city's medieval market of which it was a main thoroughfare ('cheap' being medieval English for 'market' or 'marketplace'). Floral Street in Covent Garden echoes Victorian London's major cut flower market. Fleet Street echoes the now subterranean Fleet, once London's second river.

Buildings too are part of the text by which we read the city. In Brick Lane in London's East End, there is a mosque. It is in a Georgian building that was built in 1742 as a Protestant church for the French Huguenot immigrants who were then settling in the area. In the early 19th century it was taken over by Methodists. In 1898 it became a synagogue for the newly arrived Jewish immigrants. And in 1976 it became a mosque, reflecting another wave of immigration to London and another addition to the city's cultural depth and breadth. So the building crystallizes an essential urban process which is not so much continuous change as a *continuity of change*, and that paradoxical essence is what gives a great city its uniquely creative and disruptive energy.

Before handing over to Piero, who will speak much more relevantly and deeply about the relationship of the city to transformative entrepreneurship, let me briefly anchor what I have said in one recent example.

2016 is the 350th anniversary of the Great Fire of London. In September 1666 a fire broke out in a bakery and spread rapidly. It lasted four days and four nights and left around 80% of the city in ruins. This year, an arts organization called Artichoke staged various events to commemorate the fire and the rebirth of the city. One of these was a project entitled *London 1666*. It was designed by the American artist David Best and involved months of development, including the education and engagement of over 700 young Londoners. The task was to build a large-scale wooden model of the 17th century city. In one of the early stages of the project, schoolchildren aged 5 to 7 were taught about the fire and then were asked to draw pictures of what they would like the city to be in their own future. Many of the pictures they drew were made into laser-cut wooden panels for the model. For the construction of the model itself, young Londoners were brought in: they were aged between 16 and 24 and were neither employed nor in education or training and, this being London, were from multiple ethnic backgrounds. In the process of building the model, they learned crafts and skills and were offered introductions to employers in the construction and creative sectors, and they also were given an opportunity to obtain formal employment qualifications. The project was financed by a variety of sponsors and funders, including the City of London Corporation, the Arts Council and the UK's Department of Culture, Media and Sport.

The completed model was 120 metres long. The project was a literal example of creative destruction. The purpose in building the model was to burn it. It was set alight on the River Thames on 4 September 2016 in front of a huge audience (the Great Fire burned from 2 to 5 September 1666) . The event was televised live and the broadcast included interviews with some of the young Londoners who were involved in the construction. You can see the broadcast on YouTube or the Artichoke website, and I highly recommend it. This was a genuinely inspirational and quintessentially urban project. It was a partnership of art, enterprise and education shaped by the city's culture and history. It merged London's past with London's present and it nourished London's future. That's how cities work.

Transnational Entrepreneurship

Chair: Dr. Rondy de Silva
Sheffield Hallam University, UK

Dr. Andrew Johnston
Sheffield Hallam University, UK

Dr. Paul Lassalle
Sheffield Hallam University, UK

Daniel Prokop
Sheffield Hallam University, UK

Dr. Busayo Ajayi
Forum for Sustainable New Ventures, UK

How transnational entrepreneurs engage with institutional voids: learning for policy, practice and research

Transnational Entrepreneurs (TEs) are migrant entrepreneurs engaged in concurrent cross-border economic activities that link their country of origin (COO) and their destination/host country. Scholarly activity on transnational entrepreneurship has gained momentum only in the past fifteen years, and is viewed as a field of study which represents an ‘‘alternative form of immigrant economic adaptation’’. This recent momentum in scholarly activity on transnational entrepreneurs can be attributed to the positive economic impacts such skilled migrants are shown to have both in developing economies and emerging markets. Despite this, the extant literature still evidences very little research on TEs that has been conducted in emerging markets which suggests it is potentially a very fruitful area for research.
It is argued that TEs possess the distinct advantage of 'bi-focality', which enables them to navigate the often very different market and institutional conditions in their countries of operation. Therefore, they are also well placed to recognise institutional voids and capitalise upon them, which offers a further area of learning that can be gained from TE research. Arguably, the attraction, retention and engagement with such transnational entrepreneurs remain both in the interest of governments and policymakers alike. This panel discussion explores the important role migrants can play in the development of an economy and the need to develop such modes of entrepreneurship.

Objectives and Outcomes

The primary objective of this panel is to raise interest and promote scholarly activity on transnational entrepreneurship by raising awareness of the key debates within this area of research. A further objective is to explore the role of institutional voids within emerging markets and the opportunities and challenges they pose to entrepreneurs seeking to operate within such contexts. It is also hoped to encourage reflection on policy needs that can foster such important migrant economic activity.
The anticipated outcomes of this panel discussion will include enhanced understanding of the phenomenon of transnational entrepreneurship and how it fits within wider international entrepreneurship research. Panellists and audience will also engage in discussion and debate about the nature of institutional voids in emerging economy contexts.

The topics to be covered will include

- Transnational Entrepreneurship, what's in a name? Who is a transnational entrepreneur? The debates on definition and the challenges of setting it apart from international entrepreneurship and overthrowing the shackles of ethnic entrepreneurship.
- The value of encouraging and fostering diaspora and transnational entrepreneurship for home and host countries, what policy developments are needed. Entrepreneurial eco-systems
- Transnational entrepreneur bi-focality, what can we learn from how they engage with institutional voids? How do they capitalise on voids, adapt and change institutions in economies that have less developed formal institutions?
- Panel discussion to end with deliberations on the future of transnational entrepreneurship research and the role of migrant entrepreneurship

Format

The proposed format for the discussion is as follows

- Moderator will start with opening talk introducing the relevance of migrant entrepreneurship research in the current context and where transnational entrepreneurship fits within International business research

- Moderator will briefly introduce the panellists and their areas of expertise

- Panellist presentations/discussions will based on targeted questions by the moderator

- Q and A with audience (audience involvement not limited to end of session but will be allowed to pose questions during the key debates)

Transnational Entrepreneurship:
A Case Study of the Black African Entrepreneurial Diaspora in the United Kingdom.

Dr. Busayo Ajayi

University of Essex

An Agenda: Why this topic/Our Motivation

Explanation
Transnational Entrepreneurship address the emergence
Of a new way of doing business.

Transitional Entrepreneurship nulifies the deficit model
Identifying the entrepreneural endevour.

The Objective Explanation

- This is a neglected area of international business and Entrepreneurship
- Introducing new ways of doing business and creating opportunities
- Nullifying the deficit model/identifying the entrepreneurial endeavour

- **Transnational Entrepreneurship as part of international business**
- **Historical explanations**
- **Understanding transnational activity**
  - **At Firm level**
  - **At Network Level**

1st Aspect

Research on how networking capabilities influence Export performance of Nigeria Agricultural SME's shows that Entrepreneural diaspora's make more profit and grow better than entrepreneural firm that do not have link or International networks.

Also firms that engage diaspora entrepreneurs as foreing intermediaries perform better.
Indicating that Diaspora entrepreneurs play important role on the impact of Networking capabilities on Africa SME's export performance.

Diasporal Entrepreneurs strenght of ties, relational capabilities and trust that they have been building in the country they migrated to gives them better position to co-ordinate export activities.

Diasporal Entrepreneurs has been able to build relationships that can be used to initiate, coordinate and share information during export transactions between Africa and UK.

" *social actors who enact networks, ideas, information & practices for purpose of seeking business opportunities or maintaining businesses within multiple social fields ….to promote entrepreneurial activities and societal changes)* " (Honig, Drori and Carmaichel , 2010)

Theoretical explanations for history of interactions, influences, cultural affiliations: Theory of Practice (Bourdieu, 1977,1990, 2008, Pickel, 2005, Schatzki, et al, 2001)

In Practice

- Diaspora are a major source of:
  - Foreign direct investment (FDI)
  - Market development (including outsourcing of production)
    - Technology transfer
    - Philanthropy
    - Tourism
    - Political contributions
    - Flows of knowledge, new attitudes, and cultural influence
- Countries of origin that actively court their Diasporas in a variety of different ways and with different priorities.

Vibrant economy: with increased formalization of economy of country of origin + business-friendly supervisory environment allowing easy access to finance

Engagement policies: fiscal, monetary and institutional - special legal status, low import duties and provision of about business laws and regulations;

The perspectives of politics and culture: high & sustainable business creation rates correlates to good governance. Ramamurti, 2004);

Financial capital access: Some micro-finance schemes are bankrolled by diaspora organizations (Kate et al, 1999);

Positive sociocultural opinions: of entrepreneurs and entrepreneurship (Thomas and Wee-Liang, 2001). Diaspora exposure to several cultures may develop viewpoints of entrepreneurship different from those prevalent in their country of ancestry (e.g. celebrations of accomplishments of diaspora entrepreneurs in Taiwan, Israel, China, Nigeria and India (Tracy, 2010).

The Problems of Diasporic Involvement in Countries of Origin

Institutional environment which has strong casualness, extensive institutional voids, and speedy institutional changes (Peng, 2002, 2003).

Biggs and Shah (2006) examined how SMEs in Sub-Saharan Africa get around formal institutional voids as they establish sustainable channels such as long lasting business networks, business relationships and ethically based synergistic circuit of business stakeholders and partners

Significance of informality in exchanges, institutions, and networks (Kuada, 2010)

The Diaspora?

Diaspora as more than migrants or co-ethnics

Ontologically

Brubaker's (2005) definition (diaspora rather than a migrant): an individual has to meet three criteria:

- *dispersion,*
- *a homeland orientation and*
- *boundary maintenance*", i.e. the individual should have a defined and peculiar identity with reference to the host country.

Conceptual shift from "brain drain" to "brain circulation" has created a new complexion to the inquiry process (Filatotchev et al., 2009; Saxenian, 2005). This suggests that diasporas are not mere migrants as they play invaluable roles in the development of their homelands by understudying their adopted country and tapping from the resources at their disposal

Spatially

Homeland+ Adopted land; Svasek (2008), "the ongoing importance of the homeland has some cost, and substantial work in the culture arena examines how displacement affects Diasporas".

Entrepreneurially: Resource Mobilisation + Opportunity Development + Sources of innovation based on networks

"Sharing of capital, creation and expansion of businesses" (Flisi and Murat, 2011), "technical knowledge" (Agrawal et al., 2011 and Oettl and Arawal, 2008) and "expectations of how business should be conducted" (Riddle and Brinkerhoff, 2011).

The African Diaspora

African Diaspora represents indigenous Africans (regardless of nationality or citizenship) who live outside the African continent and who show the inclination to contribute to **continental development** and the building of the African Union (AU cited in Ionescu, 2006)

These persons, notwithstanding the cultural and political differences among them, share sensitive bond with one another and with their continental ancestry and face similar challenges in raising and understanding themselves (Palmer, 2000).

2nd Aspect

Transnational Entrepreneurship at the level of the firm:

Growth in business as a function of the relationship between business networks, innovative capabilities & performance(Mitra et al,2015)

With particular reference to the African Diaspora in UK we text if –

H1: International networking significantly affects the performance of SMEs

H2: There is a positive and significant relationship between networking capabilities and the performance in SMEs

With particular reference to the African Diaspora in the UK

Results

Hypotheses	Path coefficient	C.R.	p Value	Test results
H1: INNET→FP	0.59	8.95	***	Accepted
H2: NI→FP	0.86	9.44	***	Accepted
H3: NC→FP	0.78	8.76	***	Accepted
INNET→IFSH	0.58	*		
INNET→SYN	0.78	3.96	***	
INNET→LEAR	0.85	3.91	***	
FP→PROF	0.81	*		
FP→SG	0.79	3.36	***	

Table 4.5 The results of SEM analysis

*: the item value compared by other items is assign as 1. ***: The probability of getting the C.R. is less than 0.001.INNET: International Networking, FP: Firm Performance, NC: Network Capacity, NI: Networking Intensity, IFSH: Information Sharing, SYN: Synergy, LEAR: Learning, PROF: profitability, SG: Sales Growth.

General Findings

Iinternational networking of Diaspora owned SME's and firm performance coefficients have significant value.

Trust, Synergy, Strong ties that exist between Diaspora entrepreneurs and their country of place of origine firm have positive and Significant effect on the growth of the firm.

Our findings on Networked Learning and Networked Resources of Diaspora

International networking undertakings of firms had a positive effect on firm performance (β=0.54).

The effect of international networking activities of firms on profitability (β=0.57) is greater than its effect on sales growth (0.49).

Positive relationship exist between network resources and firm performance,

Received Wisdom of Networked Learning and Networked Resources

Floren and Tell (2004) highlighted the importance of networking learning and the role of trust in improving the network activities in groups and cooperative connections.

Bonner et al (2005) who contended that company proprietors and managers do not give heed to networks learning undertakings of companies.

Kenny (2009) discovered negative relationship between network learning and international performances.

Kale et al (2000) also deliberated on the fact that even firms with advanced experience in coalition practices did not benefit from previous experiences.

Theoretical Implications

Outcomes corroborate original conceptual arguments in this paper.

- Positive aspects of networking capacity and networking intensity - possible manifestations of the ontological approach of the African diaspora (Brubaker (2005; Palmer, 2000).

- Having ontological base for establishing relationships across multiple habitus demonstrates capacity for engagement in spatial networks stretching across the African content and in Europe (Svasek, 2008)

- Supports basis of the conceptual shift from “brain drain” to “brain circulation” which enhances the scope of global networking (Filatotchev et al., 2009; Saxenian, 2005).

- From entrepreneurial perspective, resource mobilization is the corollary of opportunity development By tapping resources in their multiple habitus and by expanding the sources of innovation our respondent firms demonstrate a capacity to do so and to engage in intense networking.

- Involves “sharing of capital, creation and expansion of businesses” (Flisi and Murat, 2011), “technical knowledge” (Agrawal et al., 2011 and Oettl and Arawal, 2008), and “expectations of how business should be conducted” (Riddle and Brinkerhoff, 2011).

These firms also show higher levels of performance.

Managerial Implications

Importance of understanding structural characteristics of network which are relevant to development of innovative capabilities of the firms.

Firms increasing and diversifying network contacts enhance network density and, therefore, likely to be associated with better innovative capabilities - superior access to important ideas and opportunities, resulting in stronger innovative capabilities.

Long-term interdependence in business collaborations tends to be a catalyst of innovation, given the positive association between network reciprocity and innovative capabilities of the participating firms.

Importance of examining in-depth the roles of “weak ties” and “strong ties” in facilitating innovation of firms Good management practice, especially in the international market, requires smart manipulation of different ties to both consolidate existing contacts and search for new markets.

Policy Implications

how different firms network, how they approach their understanding of global networks, and what resources are best deployed for this purpose can help to facilitate international trade and business engagement for both the diaspora and the wider communities.
