

# Building Entrepreneurial Ecosystems in Europe: Challenges for Policy Design





I wish to make three points

**Entrepreneurial ecosystems require a new approach to policy**

**Successful policy needs to mobilise and engage with ecosystem stakeholders**

**Successful stakeholder engagement can eliminate the need for top-down policy implementation**

This is because entrepreneurial ecosystems are complex

**You cannot pin down and correct specific  
market failures**

**No one knows how the ecosystem really  
works**

**Complexity breeds inertia, path dependence  
and unintended consequences**

**Ecosystem performance can be held back by  
systemic bottlenecks**

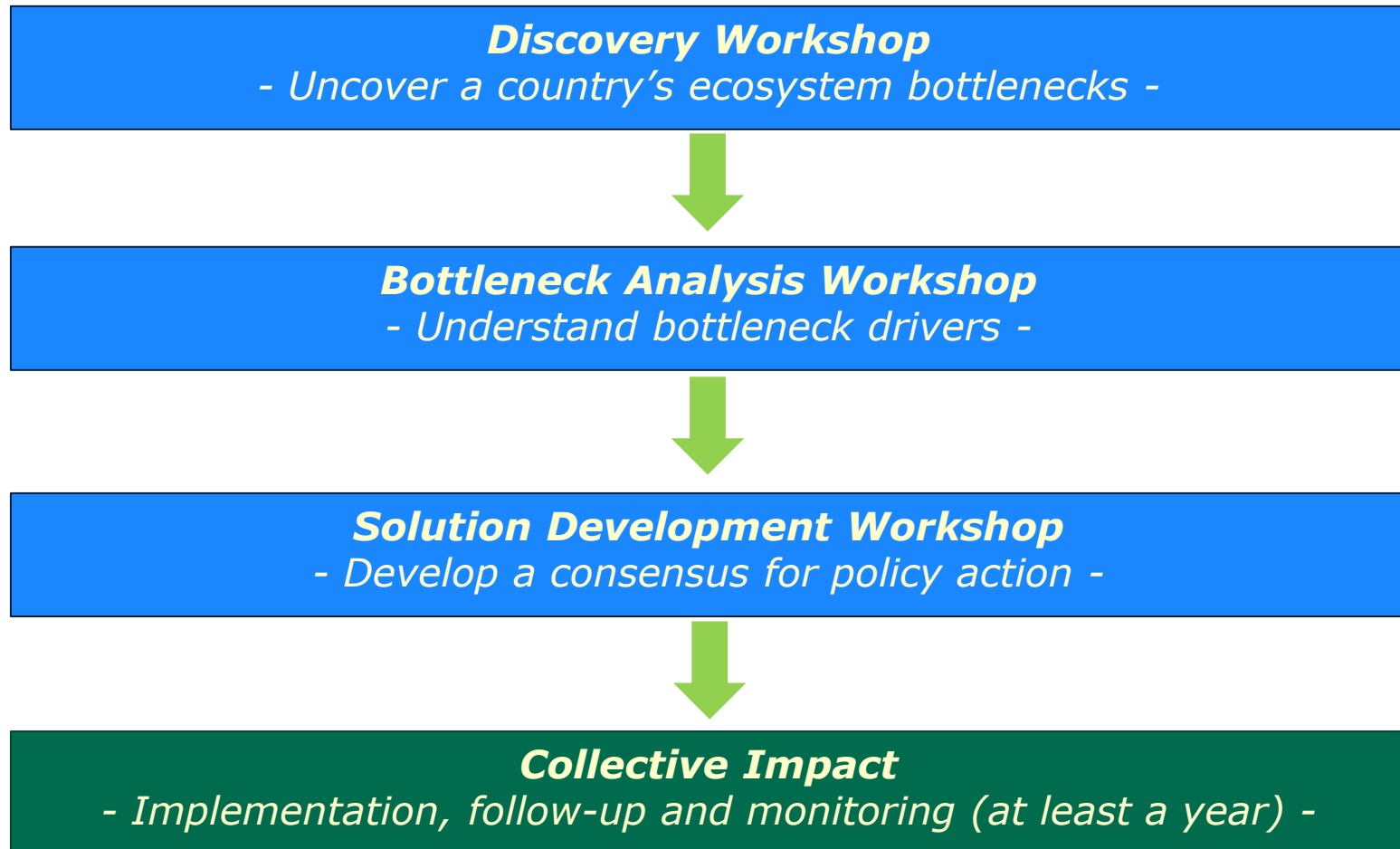
This is why ecosystem policy must engage stakeholders

**Ecosystem stakeholders can contribute  
complementary perspectives**

**Stakeholder engagement promotes mutual  
awareness, commitment and coordination**

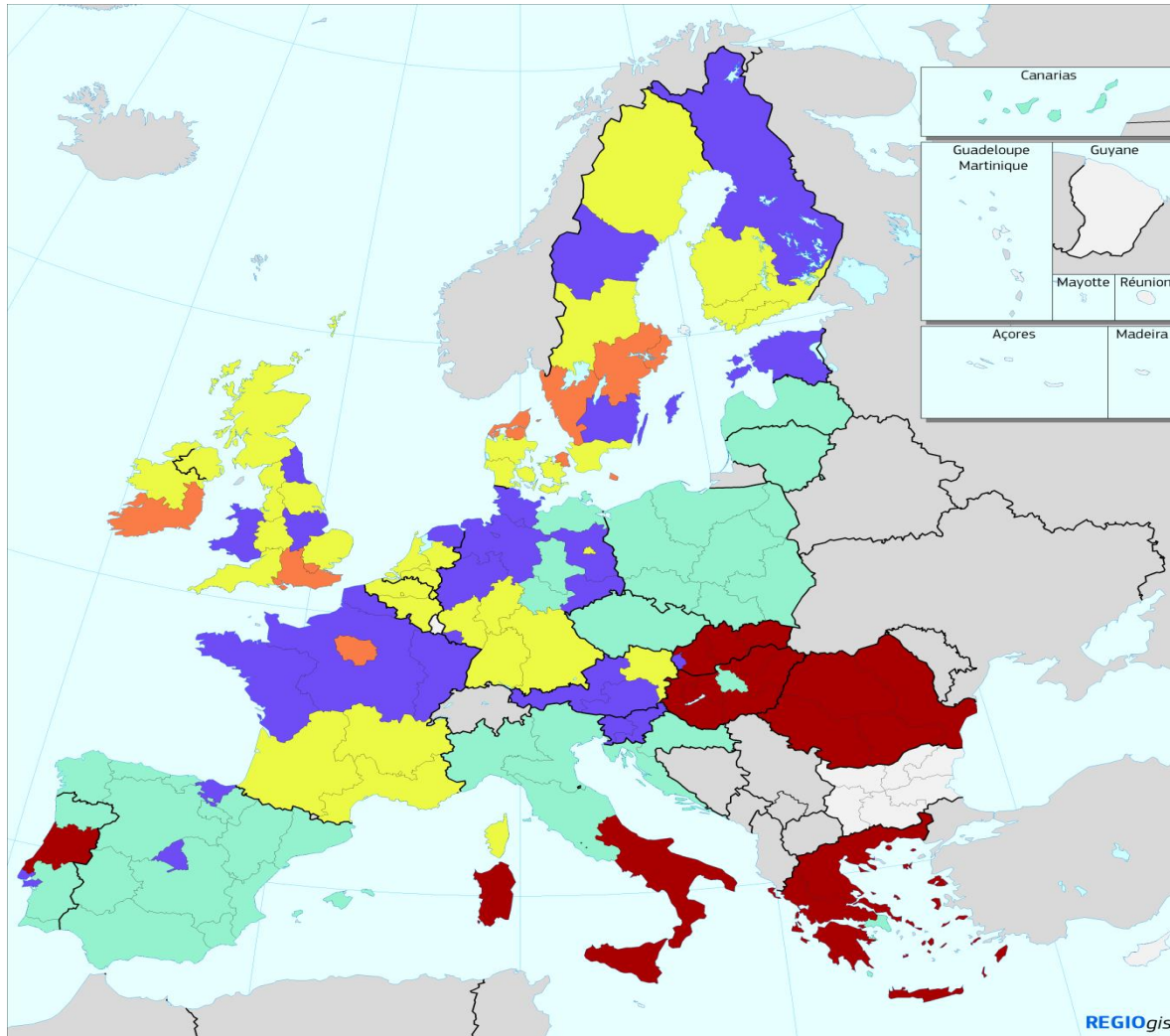
**Insights thus produced can complement  
'hard' data for more relevant, evidence-based  
insight**

## GEDI Ecosystem Facilitation Process





# Example: Regional Entrepreneurship Index



## REI data

Rank	Code	Region	REDI	Rank	Code	Region	REDI
1	DK01	Hovedstaden	82.2	100	EL3	Attiki	31.3
2	UKI	London	79.9	101	PT15	Algarve	30.9
3	FR1	Île de France	79.2	102	ES43	Extremadura	30.3
4	SE11	Stockholm	73.8	103	HR04	Kontinentalna Hrvatska (Continental Croatia)	29.9
5	SE12	Östra Mellansverige	72.7	104	PT18	Alentejo	29.4
6	SE23	Vastsverige	72.2	105	PL3	Region Wschodni	29.2
7	IE02	Southern and Eastern	72	105	PT11	Norte	29.2
7	DK05	Nordjylland	72	105	PT16	Centro (PT)	27.6
9	UKJ	South East (UK)	69.5	105	ITG	Isole	27.6
10	SE22	Sydsverige	67.3	109	ITF	Sud	27.3
11	DE3	Berlin	67.2	110	SK02	Západné Slovensko	25.8
12	DK03	Syddanmark	65.1	111	SK03	Stredné Slovensko	24.9
13	BE1	Région de Bruxelles-Capitale	64.9	112	SK04	Vychodné Slovensko	24.5
14	SE33	Övre Norrland	64.7	113	HU23	Dél-Dunántúl	23.8
15	NL3	West-Nederland	64.4	114	EL1	Voreia Ellada	22.7
16	DK04	Midtjylland	64.3	115	HU31	Észak-Magyarország	22.4
17	FR7	Centre-Est (FR)	64.2	116	RO3	Macroregiunea trei	22.1
18	IE01	Border. Midland and Western	63.4	117	HU21	Közép-Dunántúl	22
19	DE7	Hessen	63.3	118	HU22	Nyugat-Dunántúl	21.5
20	FI1B	Helsinki-Uusimaa	62.2	119	HU32	Észak-Alföld	21.4
21	BE2	Vlaams Gewest	62.1	119	EL4	Nisia Aigaiou. Kriti	21.4
22	UKH	East of England	61.5	121	HU33	Dél-Alföld	21
23	DK02	Sjælland	60.7	122	RO4	Macroregiunea patru	19.7
23	UKK	South West (UK)	60.7	123	EL2	Kentriki Ellada	19.5
23	AT1	Ostösterreich	60.7	124	RO1	Macroregiunea unu	19.4
26	BE3	Région wallonne	60.1	124	RO2	Macroregiunea doi	18.4

INSTITUTIONAL VARIABLES			#	INDIVIDUAL VARIABLES			#	PILLARS			#
ENTREPRENEURIAL ATTITUDES	Market Agglomeration	0.46	28	Opportunity Recognition	0.70	7	Opportunity Perception	0.39	15		
	Tertiary Education	0.80	17	Skill Perception	0.53	15	Start-up Skills	0.60	16		
	Business Risk	0.72	12	Risk Acceptance	0.43	18	Nonfear of Failure	0.46	14		
	Internet Usage	0.92	14	Know Entrepreneurs	0.57	12	Networking	0.79	11		
	Corruption	0.78	16	Career Status	0.41	27	Cultural Support	0.55	19		
Entrepreneurial Attitudes									53.7	13	
ENTREPRENEURIAL ABILITY	Economic Freedom	0.73	17	Opportunity Motivation	0.80	11	Opportunity Startup	0.65	13		
	Gender Equality	0.88	14	TEA Female	0.53	14	Gender	0.48	11		
	Technology Absorption	0.78	13	Technology Level	0.83	11	Technology Sector	0.79	12		
	Staff Training	0.66	14	Educational Level	0.65	18	Quality of Human Resources	0.52	19		
	Market Dominance	0.64	18	Competitors	0.99	4	Competition	0.70	11		
Entrepreneurial Ability									59.6	14	
ENTREPRENEURIAL ASPIRATIONS	Technology Transfer	0.72	16	New Product	0.72	7	Product Innovation	0.67	16		
	GERD	0.81	15	New Technology	0.61	14	Process Innovation	0.69	15		
	Business Strategy	0.61	17	Gazelle	0.85	8	High Growth	0.73	10		
	Globalisation	0.94	6	Export	0.87	12	Internationalisation	0.94	4		
	Capital Market	0.41	25	Informal Investment	0.62	25	Risk Capital	0.41	27		
Entrepreneurial Aspirations									63.6	13	
INSTITUTIONAL		0.72	15	INDIVIDUAL		0.67	8	GEDI		59.0	14

Bottom quartile										
Lower middle quartile										
Higher middle quartile										
Top quartile										

Estonia performs relatively less well in comparison against EU countries than globally

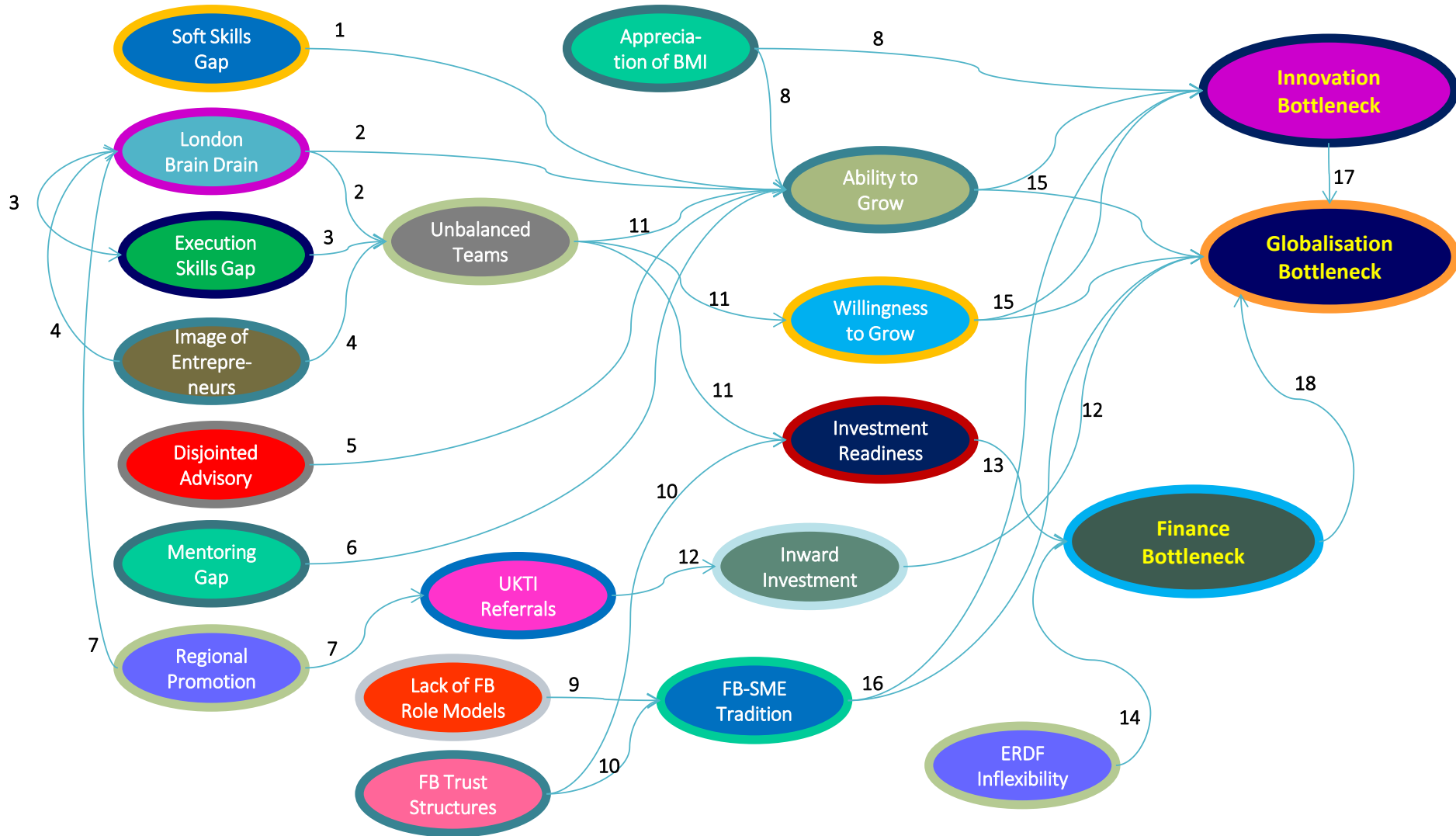
Overall, the EU comparison suggests Estonian weaknesses for institutional variables, where Estonia mostly lags behind EU mean

Overall, the EU comparison suggests strengths for Estonia in individual-level variables, except for Entrepreneurial Attitudes, where the Estonian weaknesses are confirmed by the EU comparison

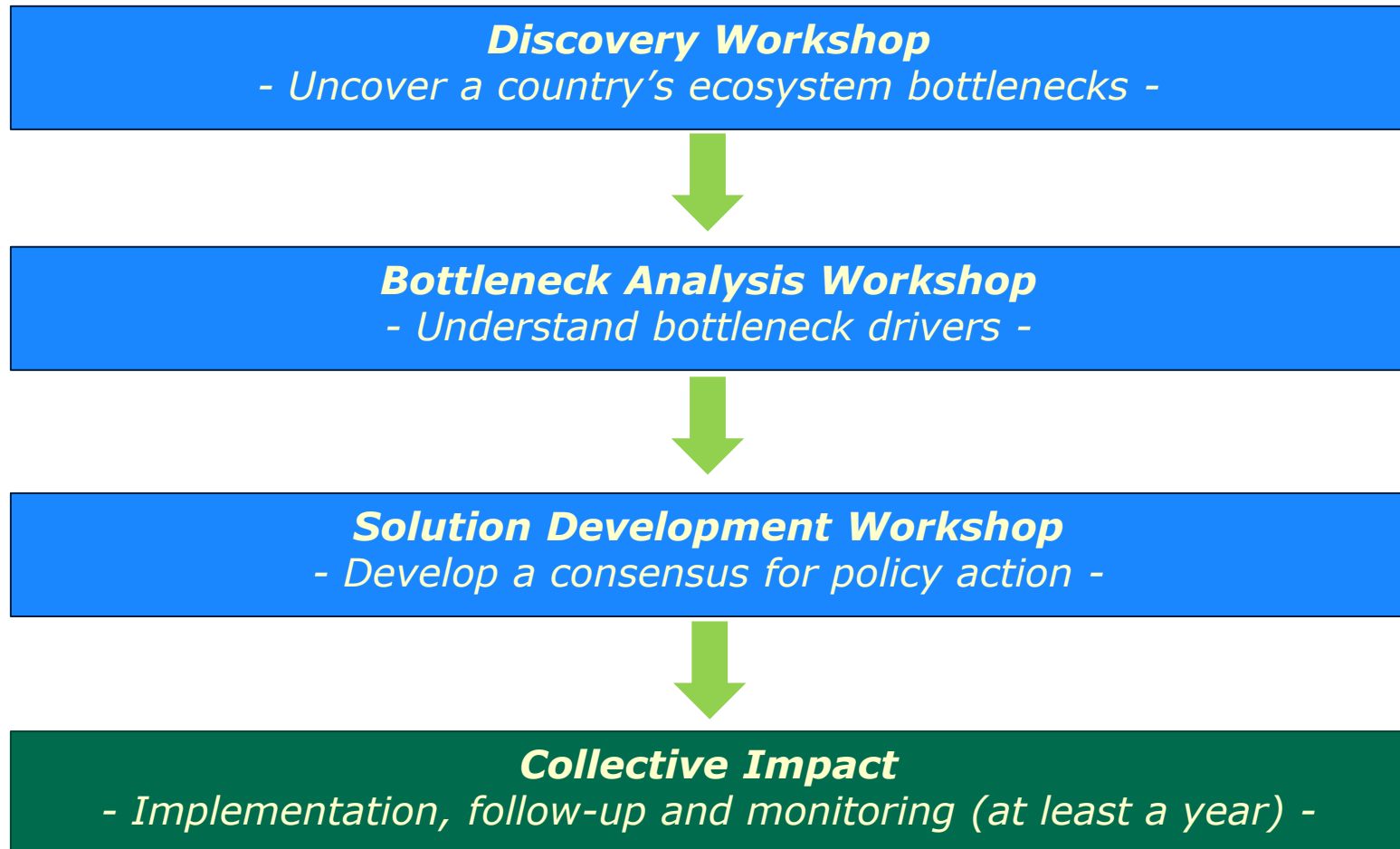
In the EU comparison, Estonia's weakest pillar overall is Risk Capital (27<sup>th</sup>), followed by Cultural Support (19<sup>th</sup>), Quality of Human Resources (19<sup>th</sup>), Start-up Skills (16<sup>th</sup>), Product Innovation (16<sup>th</sup>), and Process Innovation (16<sup>th</sup>)



# North West Bottleneck Drivers



## GEDI Ecosystem Facilitation Process



## Contact information

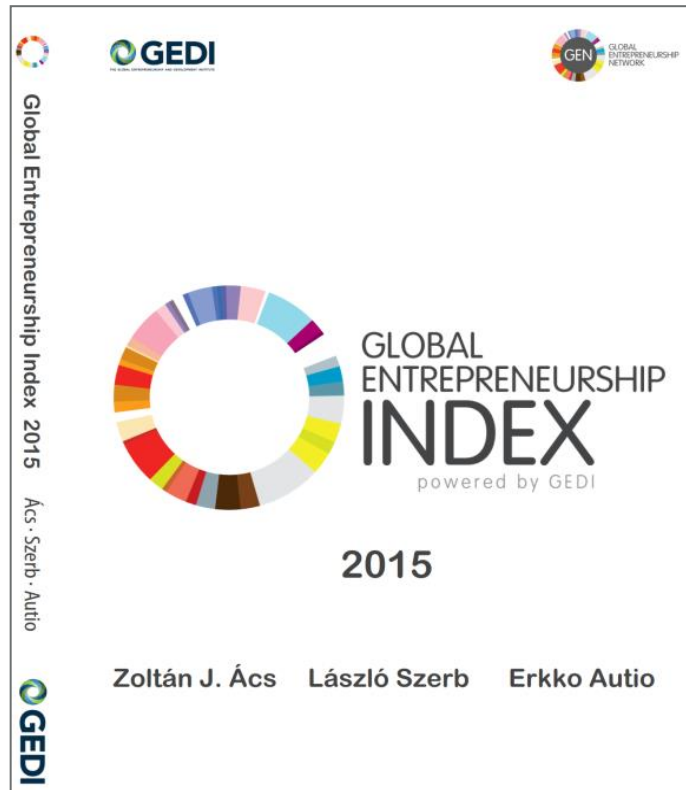
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## About GEDI

- ✓ The Global Entrepreneurship and Development Institute [GEDI](#) is a non-profit organisation that advances research on the links between entrepreneurship, economic development, and prosperity
- ✓ GEDI was founded by world-leading entrepreneurship scholars from the Imperial College London, London School of Economics, George Mason University, and University of Pécs
- ✓ The GEDI methodology has been validated in rigorous academic peer reviews and has been widely reported in world media, including in The Economist, Financial Times, Forbes, and the Wall Street Journal

# GEDI's Global Entrepreneurship Index



GEDI's most significant contribution is the Global Entrepreneurship Index (GEI), a breakthrough advance in measuring the quality of entrepreneurship ecosystems at national and regional levels

## Why GEDI?

- ✓ At the national and regional levels, entrepreneurship is an *ecosystem*
- ✓ The national entrepreneurial dynamic drives *Total Factor Productivity* and *GDP Growth*
- ✓ However, ecosystem performance may be held back by *bottleneck factors*
- ✓ GEDI helps identify and remove such bottlenecks, thereby unleashing a country's entrepreneurial potential



# GEDI Has Been Widely Featured in World Media

THE WALL STREET JOURNAL  
**WSJ**

November 14, 2010, 4:45 p.m. ET  
BY THE NUMBERS | GLOBAL ENTREPRENEURSHIP

## The Best Country to Start a Business...

*...and other facts you probably didn't know about entrepreneurship around the world*

Rank	Country	Rank	Country
1	Denmark	37	Poland
2	Canada	38	Croatia
3	U.S.	39	Peru
4	Sweden	40	China
5	New Zealand	41	Colombia
6	Ireland	42	South Africa
7	Switzerland	43	Turkey
8	Norway	44	Mexico
9	Iceland	45	Dominican Republic
10	Netherlands	46	Indonesia
11	Australia	47	Hungary
12	Belgium	48	Romania



**FT**

**The Washington Post**

**The New York Times**

**The Economist**

**Schumpeter**  
**Uncorking enterprise**  
Policymakers are desperate to promote enterprise.  
A new index could help

Feb 24th 2011 | from the print edition

**Forbes**



## Global Partnerships

- ✓ **UNCTAD:** GEDI contributed to UNCTAD's Entrepreneurship Policy Framework
- ✓ **Enterprise Scotland:** GEDI facilitated an action plan to enhance Scotland's innovation-driven entrepreneurship
- ✓ **Estonian Development Fund:** GEDI helped develop Estonian entrepreneurship strategy
- ✓ **Santander:** Global partnership, analysis of UK regional entrepreneurship ecosystems
- ✓ **EU DG REGIO:** GEDI analysis of 125 EU regions included in the 2014 EU Cohesion Report
- ✓ **DELL:** Global Gender GEDI Index
- ✓ **World Bank:** GEDI report on high-impact entrepreneurship in Latin America and Caribbean



ESTONIAN DEVELOPMENT FUND



THE WORLD BANK

## GEDI Method: Key Features

- ✓ 15 pillars
  - Attitudes
  - Abilities
  - Aspirations

$$\bar{x}_j = \frac{\sum_{i=1}^n x_{i,j}}{n}$$

$$x_{i,j} = \frac{z_{i,j}}{\max z_{i,j}}$$

- ✓ Contextual weighting

$$y_{i,j} = x_{i,j}^k$$

- ✓ Normalization

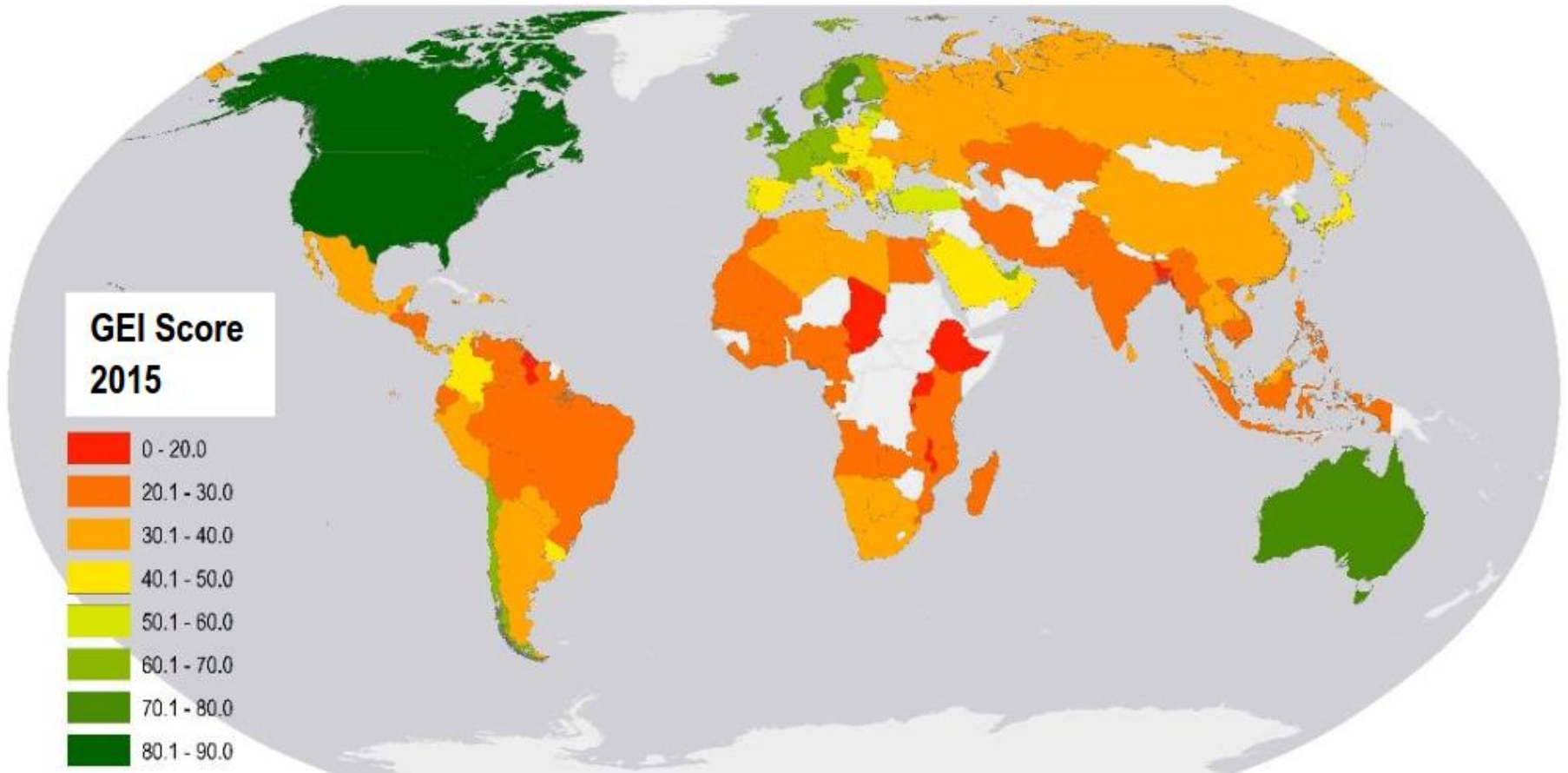
$$\sum_{i=1}^n x_{i,j}^k - n\bar{y}_i = 0$$

- ✓ Penalty for Bottleneck

$$h_{(i),j} = \min y_{(i),j} + (1 - e^{-(y_{(i),j)} - \min y_{(i),j})})$$



# GEI 2015 World Map

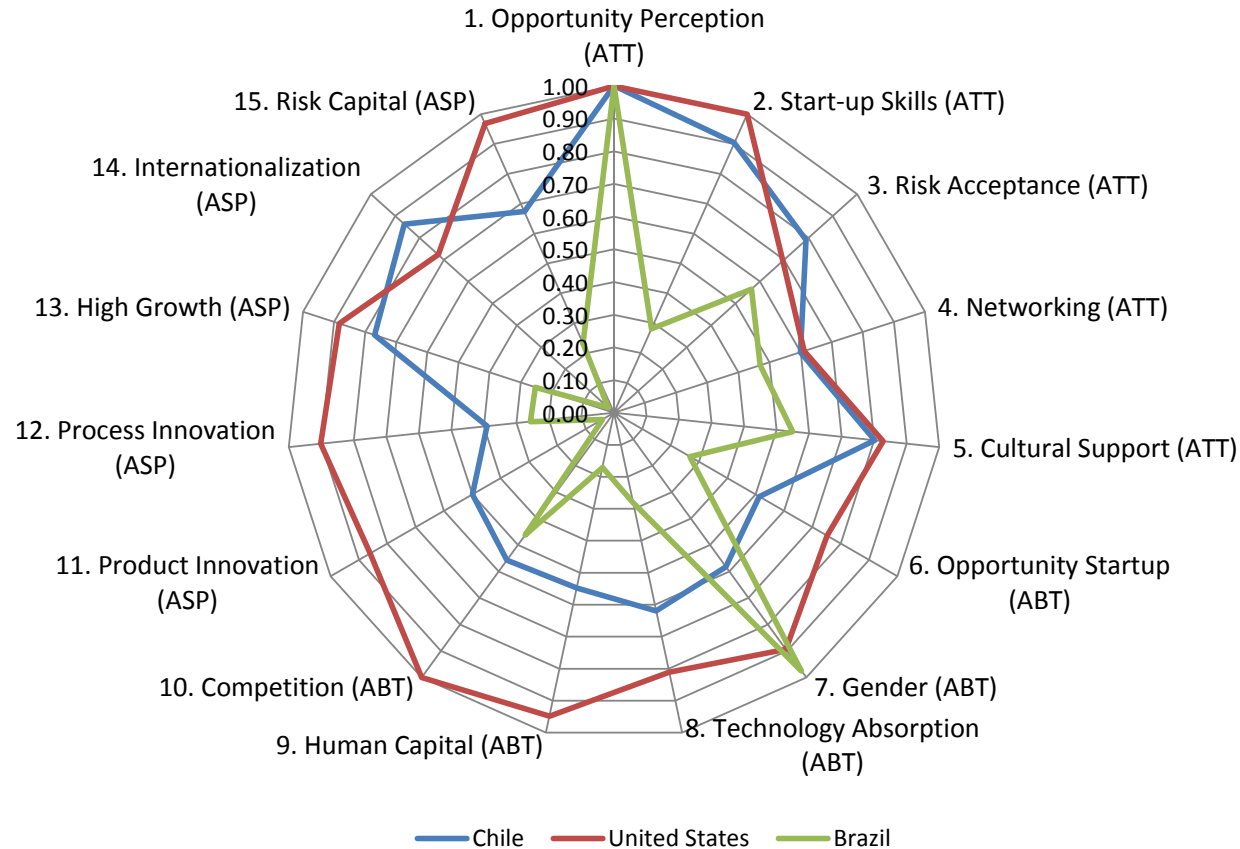


# Entrepreneurship Ecosystem Profiles: An Example

The round US profile signals absence of bottlenecks

Brazil's profile suggests bottlenecks in Startup Skills, Internationalisation, Human Capital, and Product Innovation, among others

By alleviating these bottlenecks, Brazil could expect a major improvement in ecosystem dynamic



# 2015 Rankings

Rank	Country	GEI
1	United States	85.0
2	Canada	81.5
3	Australia	77.6
4	United Kingdom	72.7
5	Sweden	71.8
6	Denmark	71.4
7	Iceland	70.4
8	Taiwan	69.1
9	Switzerland	68.6
10	Singapore	68.1
11	Germany	67.4
12	France	67.3
13	Netherlands	66.5
14	Finland	65.7
15	Norway	65.6
16	Belgium	65.5
17	Ireland	65.3
18	Austria	64.9
19	Chile	63.2
20	United Arab Emirates	61.6

Rank	Country	GEI
44	Bulgaria	42.7
45	Hungary	42.7
46	Cyprus	42.5
47	Greece	42.0
48	Uruguay	41.4
49	Italy	41.3
50	Lebanon	40.7
51	Croatia	40.6
52	South Africa	40.0
53	Malaysia	40.0
54	Montenegro	39.1
55	Costa Rica	37.7
56	Argentina	37.2
57	Moldova	37.2
58	Macedonia	37.1
59	Barbados	37.1
60	Brunei Darussalam	36.9
61	China	36.4
62	Paraguay	36.0
63	Tunisia	35.5

Rank	Country	GEI
87	Nicaragua	28.4
88	Kazakhstan	28.4
89	Trinidad & Tobago	28.4
90	Ecuador	28.2
91	Egypt	28.1
92	Bolivia	28.0
93	Gabon	27.7
94	Iran	27.7
95	Philippines	27.7
96	Senegal	27.3
97	Jamaica	27.2
98	Cambodia	26.3
99	Rwanda	26.2
100	Brazil	25.8
101	Gambia. The	25.6
102	Benin	25.6
103	Liberia	25.5
104	India	25.3
105	Ghana	24.8
106	Mozambique	24.3

UK ranking improved (9<sup>th</sup> 2014)

## GEDI Ecosystem Facilitation

- ✓ The GEI is the starting point for understanding a country's entrepreneurship ecosystem
- ✓ GEDI Stakeholder Engagement Workshops extract 'soft' insights from policy stakeholders to complement 'hard' GEI data
- ✓ GEDI Ecosystem Facilitation Process help policy-makers and policy stakeholders to think outside policy silos and agree on ecosystem priorities

