

## M2. EU Entrepreneurship T2.1 Entrepreneurial Ecosystems & Business Modelling

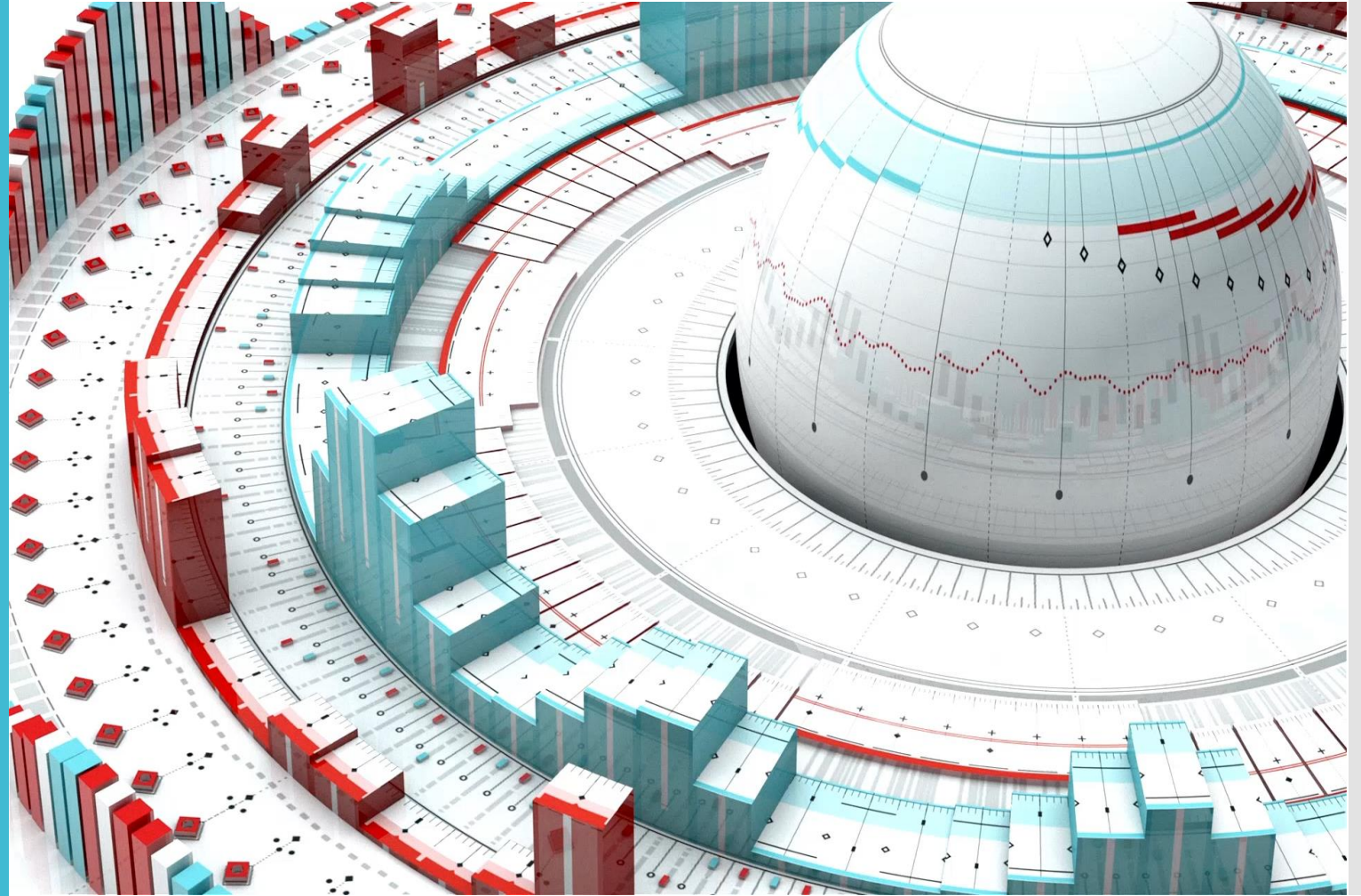
*Assoc. Professor Juliana Vassileva, PhD*

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# ENTREPRENEURIAL ECOSYSTEMS & BUSINESS MODELLING

Assoc. Prof. Dr Juliana Vassileva  
| Citeuropass



# You and Entrepreneurship? In Europe and Worldwide

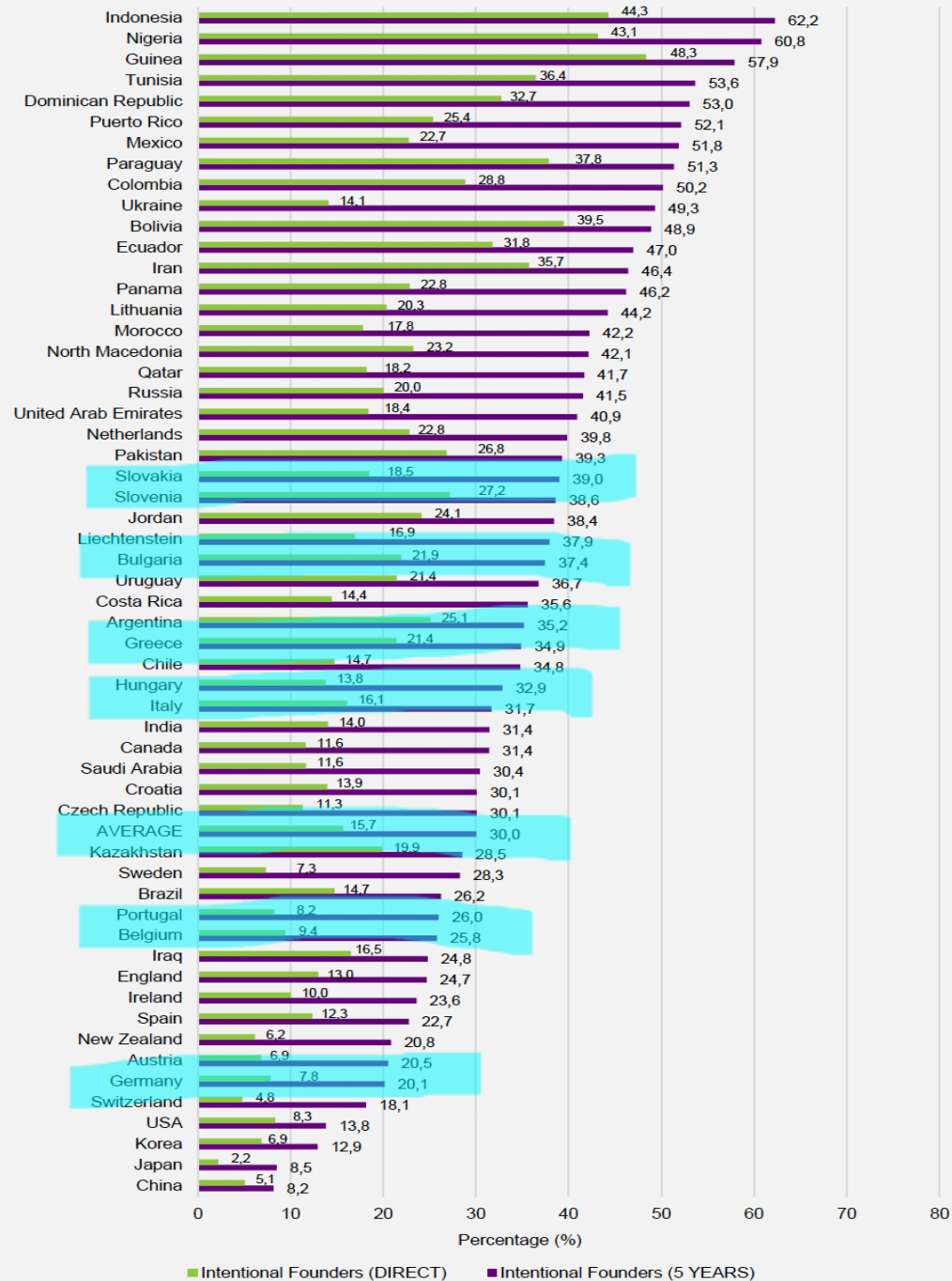
Nascent | Active | Intentional – Directly after Studies OR Years later?

# Global Students' entrepreneurial intentions and activities 2023

- 15,7 percent of all students intend to be an entrepreneur **directly** after studies (“direct intentional entrepreneurs”).
- 30 percent plan to be an entrepreneur **5 years after** completion of studies.
- A central and stable pattern is “**first employee, then entrepreneur**”.
- The career plans of “**direct intentional entrepreneurs**” are very stable: 81,2 percent of them still intend to be an entrepreneur 5 years later.
- Since 2011, the share of intentional founders (referring to 5 years after completion of studies) has been in a **similar range across GUESSS editions** (between 28,2 and 34,3 percent).
- 25,7 percent of all students are in the process of founding a new venture (**nascent** entrepreneurs). 11,1 percent already own and run their own business (**active** entrepreneurs).
- The shares of intentional, nascent, and active entrepreneurs differ considerably across countries. As in previous GUESSS editions, the overall pattern is that **developing countries tend to exhibit higher numbers than developed countries**.

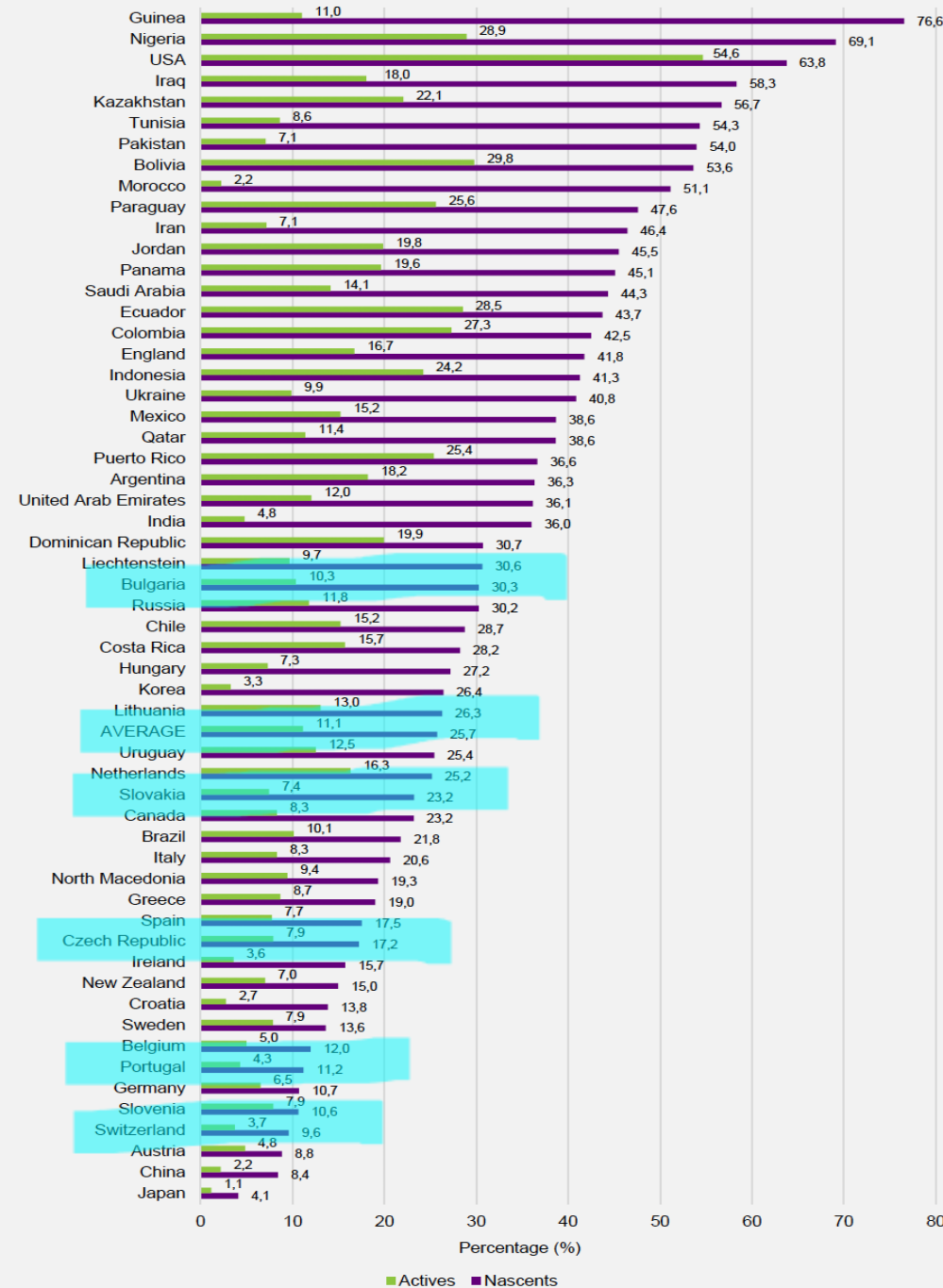
# Intentional Students- Entrepreneurs 2023

Figure 5. Share of intentional founders across countries (N = 226'718)



# Active vs Nascent Students- Entrepreneurs 2023

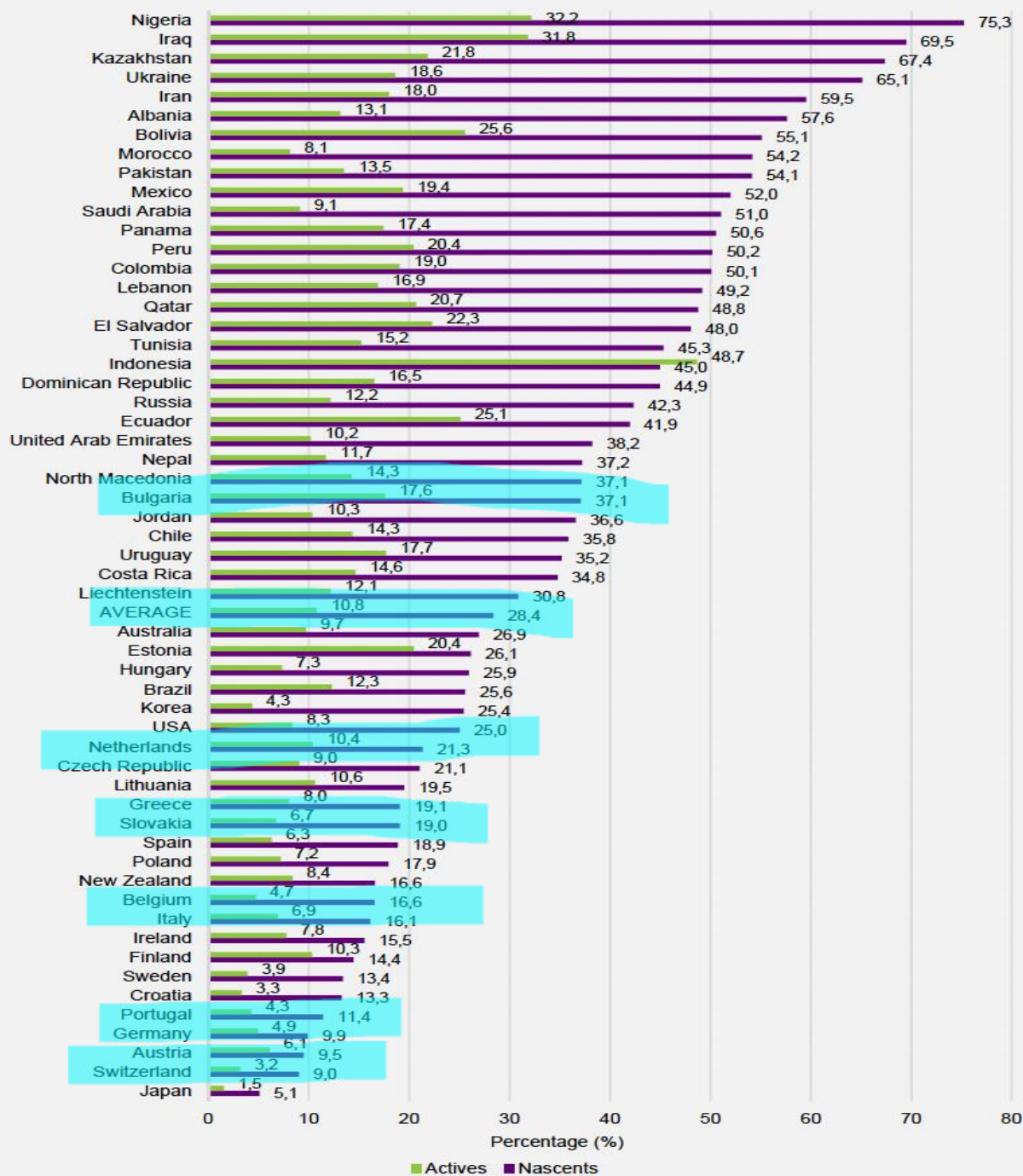
Figure 8. Shares of nascent and active entrepreneurs across countries (N=226'718)





# Active vs Nascent Students- Entrepreneurs 2021

Figure 13. Shares of nascent and active entrepreneurs across countries (N=267'366)



Entrepreneurial **intentions**, **nascent** entrepreneurship, growth and performance of **new ventures**, and family firm **succession**

Influencing factors at **individual** level (motives, social identity), **family** level (family business background), **university** level (entrepreneurship education, entrepreneurial climate and learning), **contextual** level (culture)



University of St.Gallen

Swiss Institute of Small Business  
and Entrepreneurship



<sup>b</sup>  
**UNIVERSITÄT  
BERN**

**Prof. Philipp Sieger**  
*University of Bern / GUESSS CEO*

*Prof. Thomas Zellweger*  
*Prof. Urs Fueglistaller*  
*Prof. Isabella Hatak*  
*University of St.Gallen*  
*Supervisory Board*

	2003	2004	2006	2008	2011	2013/14	2016	2018	2021	2023
<b>Worldwide</b>	1	2	14	19	26	34	50	54	<b>58</b>	<b>57</b>
Universities	1	2			500	759	1000	3000		
Responses		5000	37000	63000	93000	109000	122509	208000	<b>267000</b>	<b>226718</b>
<b>Bulgaria</b>									<b>5+1</b>	<b>31+1</b>
BG Responses									<b>717</b>	<b>1742</b>





Student Entrepreneurship 2023:  
Insights From 57 Countries

## 2023 GUESSS Global Report

Philipp Sieger / Lea Raemy / Thomas Zellweger / Urs Fueglistaller / Isabella Hatak

## National Reports based on the 2023 Survey

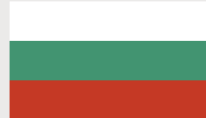
[Academic Journal Publications](#) | [GUESSS Global Reports](#) | [Practitioner-oriented Studies](#)



National Report **NORTH MACEDONIA** 2023  
Release: 21 March 2025  
[PDF\\_english\\_\(434 KB\)](#)



National Report **MEXICO** 2023  
Release: 26 February 2025  
[PDF\\_spanish\\_\(2 MB\)](#)



National Report **BULGARIA** 2023  
Release: 20 February 2025  
[PDF\\_english\\_\(4.4 MB\)](#)



National Report **Republic of KOREA** 2023  
Release: 12 February 2025  
[PDF\\_english\\_\(23.2 MB\)](#)



National Report **NETHERLANDS** 2023  
Release: 23 January 2025  
[PDF\\_english\\_\(2.5 MB\)](#)



National Report **SPAIN** 2023  
Release: 9 January 2025  
[PDF\\_spanish\\_\(5.2 MB\)](#)



National Report **ITALY** 2023

## Influencing factors

- *Entrepreneurship education and the entrepreneurial climate at the university continue to be **key determinants** of entrepreneurial intentions and activities.*
- *“Business and management” students exhibit the **strongest entrepreneurial spirit**.*
- *Also in 2023, a **gender gap** in entrepreneurship can be observed. The share of intentional, nascent, and active entrepreneurs is consistently smaller among females than among males, whereby there are considerable differences across countries.*
- *Both nascent and active entrepreneurs exhibit a slightly higher level of **subjective wellbeing** than non-entrepreneurial students. Therefore, seeking wellbeing may constitute another driver of entrepreneurial activities. Also in this regard, noteworthy differences across countries exist.*

# BG Case (NSI, 2025)

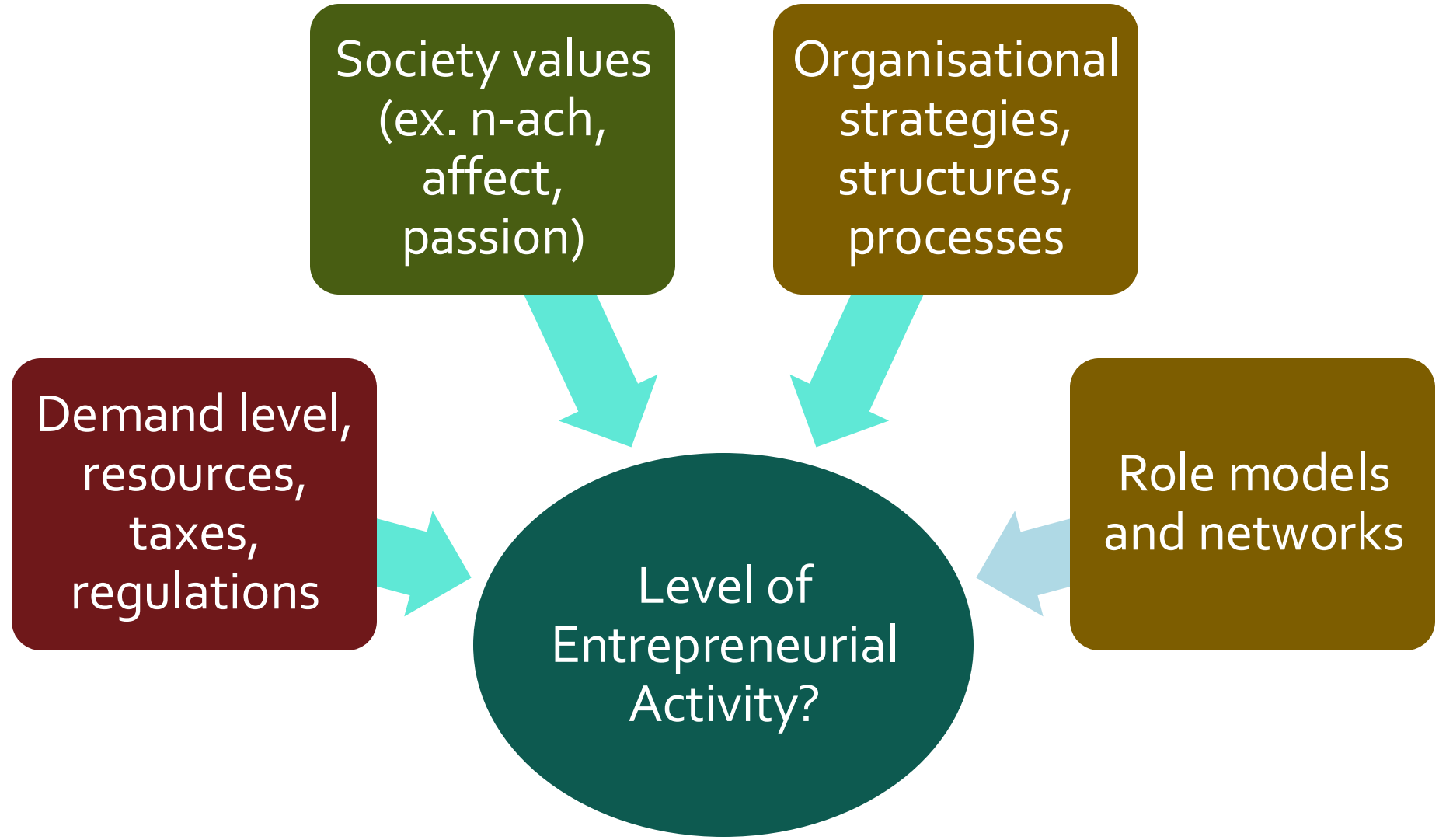
MAIN ECONOMIC INDICATORS OF NON-FINANCIAL ENTERPRISES BY SIZE OF ENTERPRISES IN TERMS OF EMPLOYED AND ECONOMIC ACTIVITY GROUPINGS<sup>1, 2</sup>

			2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
			Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses	Enterpri ses
			Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
1	Total (all NACE activities except K, O, T and U)	Tot al	323003	368229	366929	366240	372036	377383	383905	393460	404937	406310	413535	419681	411564	412878	449481	462752
Grow th %				14,0%	-0,4%	-0,2%	1,6%	1,4%	1,7%	2,5%	2,9%	0,3%	1,8%	1,5%	-1,9%	0,3%	8,9%	3,0%

TO DO  
5 minutes

- Teams by nations
- Your National Statistics Institute
- Data 2008-2023
- Influencing factors?
- Drivers of Entrepreneurial Activity?






# Interdiscipli- narity & Entrepre- neurship

(Kuratko, 2017)

**Macro** School (effects of **external environmental factors** on the potential for entrepreneurial activity, the **access to finance**, the political, cultural or economic **rejection** of the individual and their orientation towards entrepreneurship as an **alternative**)

**Micro** School (focus on **personal traits** that make a successful entrepreneur, on **business opportunities** and their **discovery**, and on entrepreneurial **strategies** oriented around the **uniqueness** of markets, leaders, products and resources)



strength of **demand** for final products and services in the economy, availability and accessibility of **resources** for new ventures, impact of **inflation** on credit use, encouragement through **tax policies** of new ventures, degree of **regulatory barriers** and **political stability** - favourable public policies for long-term investment (Kent, 1982)



drivers of entrepreneurship such as the **need for achievement** - part of society's values, emotional commitment, perseverance, passion, **independence**...  
(McClelland, 1961)

- |   |                                    |
|---|------------------------------------|
| 1. Confidence   | 22. Responsibility                 |
| 2. Perseverance, determination                                      | 23. Foresight                      |
| 3. Energy, diligence  | 24. Accuracy, thoroughness         |
| 4. Resourcefulness  | 25. Cooperativeness                |
| 5. Ability to take calculated risks                                 | 26. Profit orientation             |
| 6. Dynamism, leadership   | 27. Ability to learn from mistakes |
| 7. Optimism   | 28. Sense of power                 |
| 8. Need to achieve  | 29. Pleasant personality           |
| 9. Versatility, knowledge of product, market, machinery, technology | 30. Egotism                        |
| 10. Creativity  | 31. Courage                        |
| 11. Ability to influence others                                     | 32. Imagination                    |
| 12. Ability to get along well with people                           | 33. Perceptiveness                 |
| 13. Initiative  | 34. Toleration for ambiguity       |
| 14. Flexibility   | 35. Aggressiveness                 |
| 15. Intelligence  | 36. Capacity for enjoyment         |
| 16. Orientation to clear goals                                      | 37. Efficacy                       |
| 17. Positive response to challenges                                 | 38. Commitment                     |
| 18. Independence  | 39. Ability to trust workers       |
| 19. Responsiveness to suggestions and criticism                     | 40. Sensitivity to others          |
| 20. Time competence, efficiency                                     | 41. Honesty, integrity             |
| 21. Ability to make decisions quickly                               | 42. Maturity, balance              |

Tenacity

Source: John A. Hornaday, "Research about Living Entrepreneurs," in *Encyclopedia of Entrepreneurship*, ed. Calvin Kent, Donald Sexton, and Karl Vesper (Englewood Cliffs, NJ: Prentice Hall, 1982), 26-27. Adapted by permission of Prentice Hall, Englewood Cliffs, NJ.

**TO DO**  
**5 minutes**

## **Your Entrepreneurial potential self- assessment**

- <https://www.bdc.ca/en/articles-tools/entrepreneur-toolkit/business-assessments/entrepreneurial-potential-self-assessment>
- Your motivation... **Need for achievement/success, The lure of power/control**
- Your aptitudes... **Self-confidence/enthusiasm, Creativity/imagination**
- Your attitudes... **A belief in their ability to influence destiny, Action-oriented**
- TRUE or NOT TRUE?
- Your Take-away?



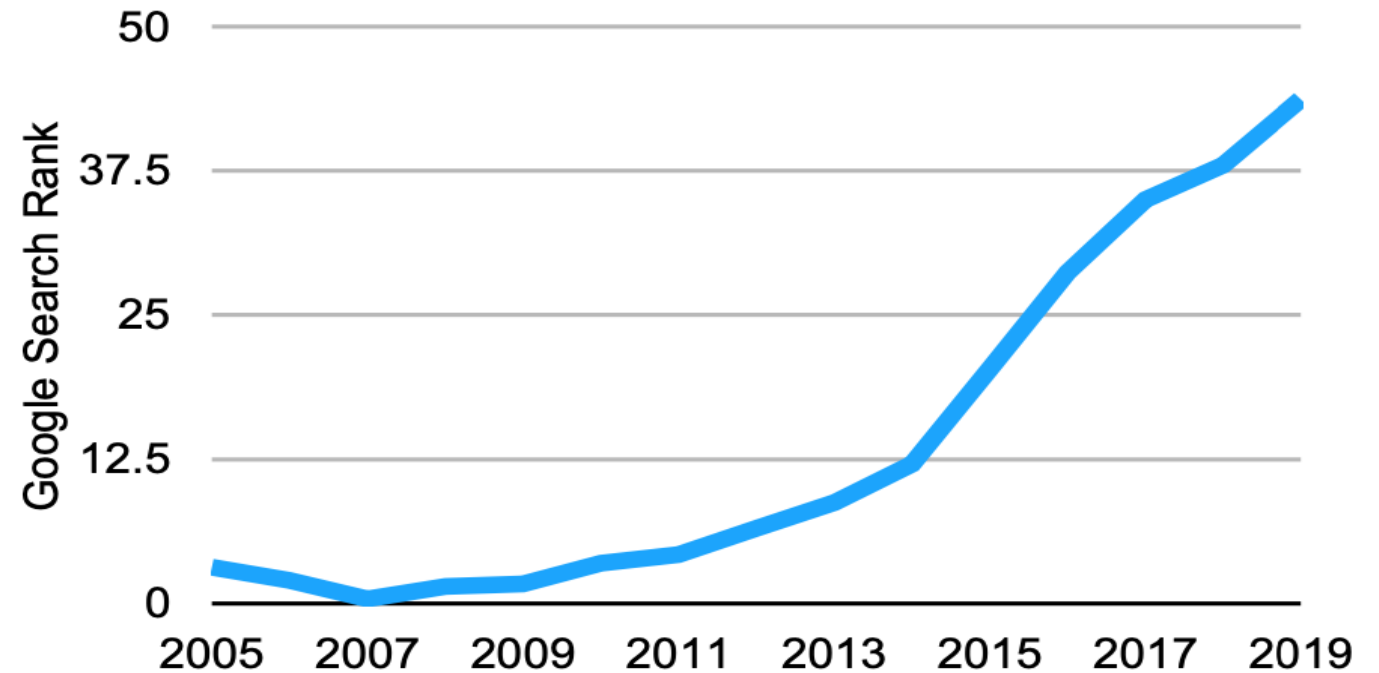
Community of  
interdependent  
players  
Role of **context** in  
promoting/ limiting  
entrepreneurship  
**Interdependencies**  
between players in  
the system

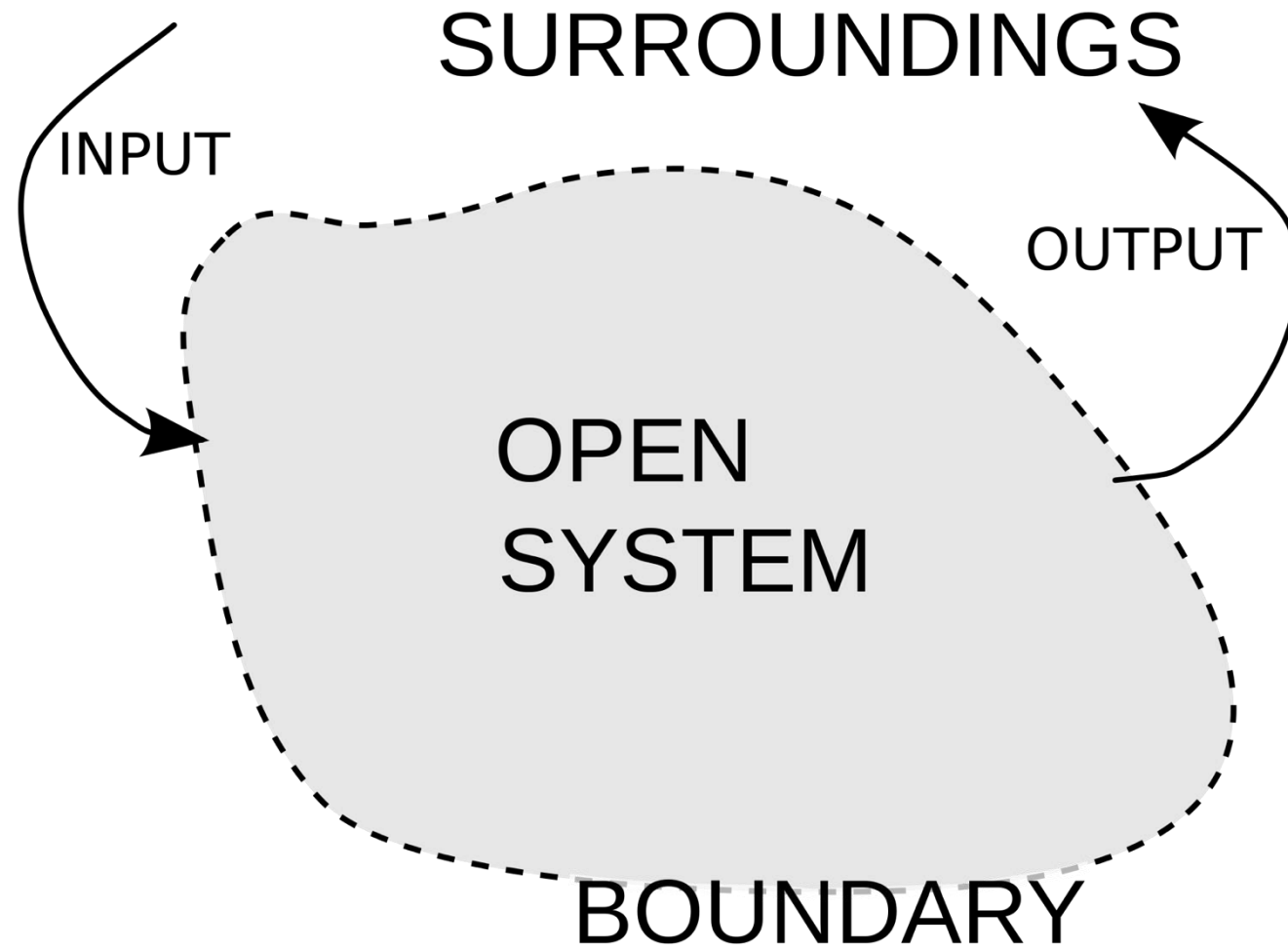


# Ecosystem

*„a biological community of organisms in constant interaction, including with their physical environment“*  
(Oxford Dictionary, 2021)

Google search trends of entrepreneurial and startup ecosystems





# EEs Definition?

... **bundle of interconnected players** (potential and existing entrepreneurs), entrepreneurial organizations (firms, venture capitalists, business angels, banks), institutions (universities, public sector agencies, financial authorities), and **entrepreneurial processes** (percentage of emerging business, number of high-growth firms, levels of 'blockbuster entrepreneurship', number of serial entrepreneurs, level of sales mindset in firms and levels of entrepreneurial ambition) that **formally and informally** come together to connect, broker and manage **performance** within the local entrepreneurial/I environment

(Mason and Brown, 2014)

# EEs Definition?

*...bundle of **stakeholders** - institutional, business and non-governmental organizations working to **enhance** entrepreneurial **attitudes, activity** and business **excellence**, interacting in a **specific** socio-economic context*

(Hadjitchoneva, 2022)



So, EEs?

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Different actors

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Independent actors

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Common objectives

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Shared objectives

---

Shared resources

---

Shared capacity/competencies

---

Shared institutions

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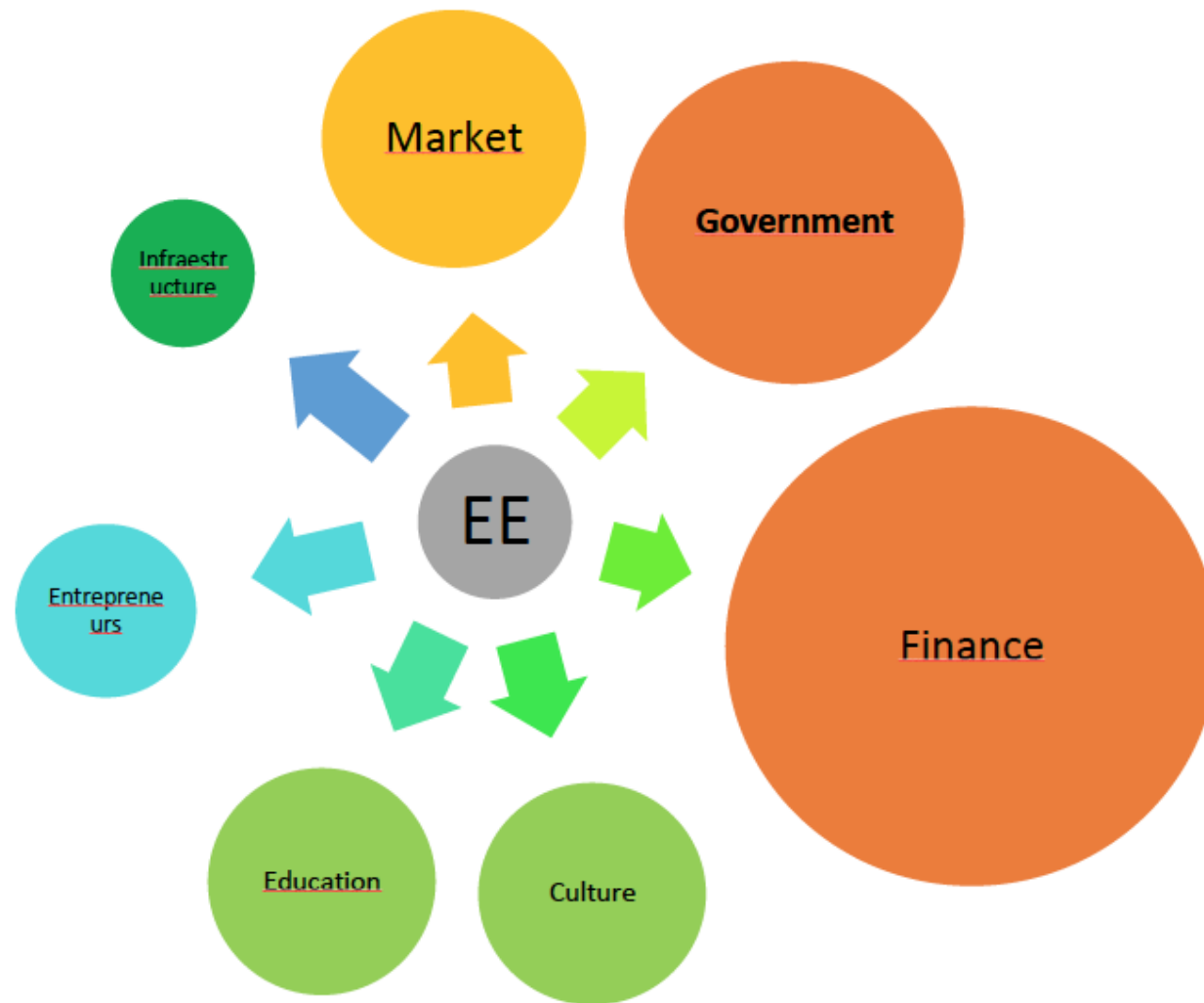
Strategic interest

Driver?

Government?

Entrepreneur?

Education?



# Domains of the Entrepreneurship Ecosystem

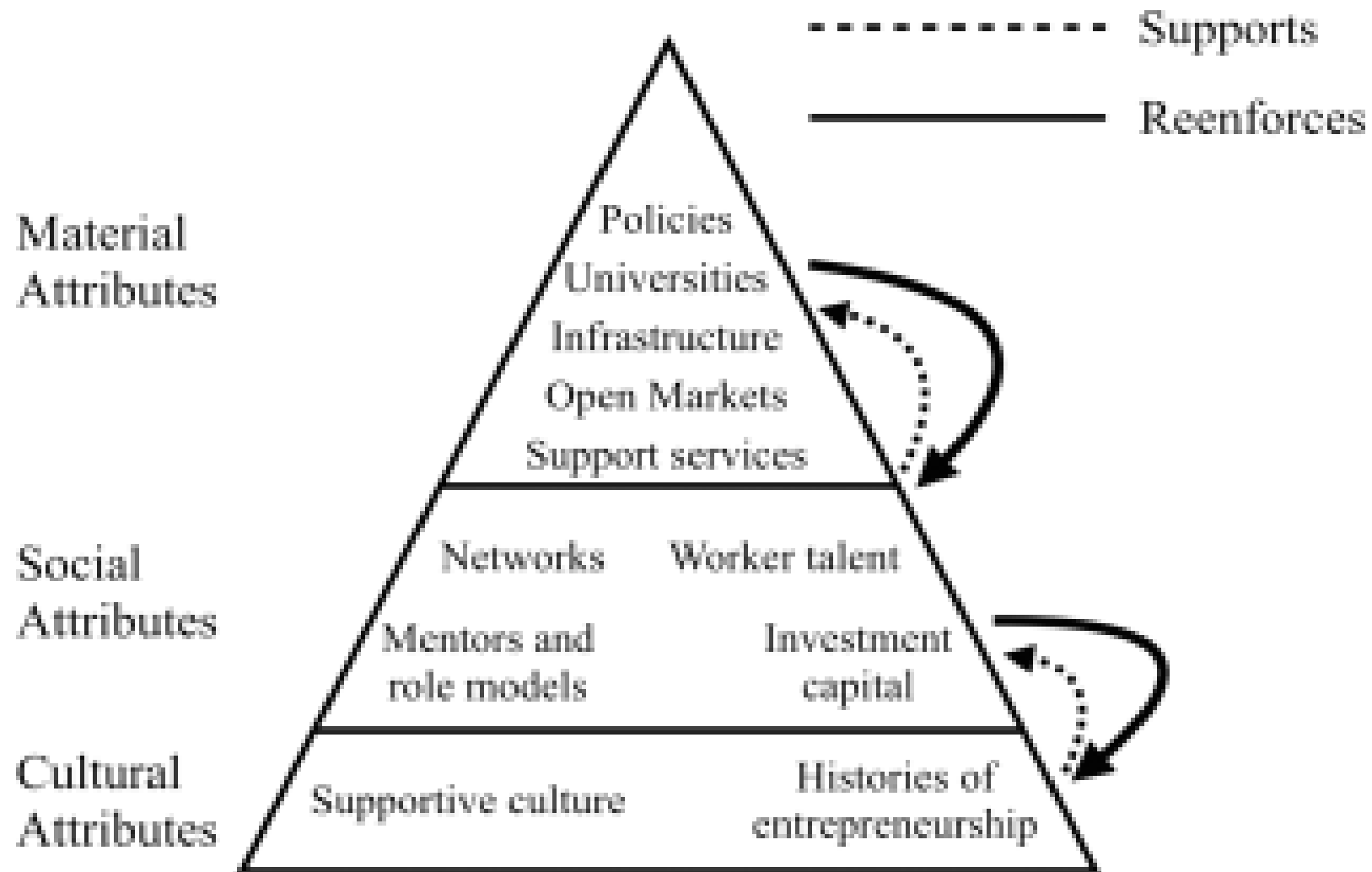


# Mazzarol's Model (2014)





# Spigel's Model (2015)



# Components for Success?

	Authors												
		ISENBERG 2011	Aleksis Aaltonen 2016	Stam & Spigel (2016)	OCDE (2016d) , Start-up Latin America 2016	Audretsch, D.B. & Belitski, M. J (2017)	Neumeyster S,C. Santos 2018	Ferrero 2018	GEM 2017 - 2018	GEI 2016	García Godoy 2016	Prahald C. K., 2005	Gómez, E. A., & Uría, D. J. C. (2017)
ENTREPRENEURSHIP ECOSYSTEM FACTORS	Human Capital	*		*								*	*
	Market	*		*	*				*	*	*	*	*
	Government	*	*	*	*	*	*		*	*		*	*
	Finance	*	*	*	*	*	*	*	*	*	*	*	*
	Culture	*		*	*	*		*	*		*		
	Education		*	*			*	*	*	*			*
	Large companies		*										
	Entrepreneurs and potential entrepreneurs		*				*		*	*	*	*	
	Private investors		*				*			*	*		
	Social Capital			*									
	Science and Tech.			*									*
	Productive Structure			*									*
	Melting pot (Tolerance, diversity, Integration)					*					*		

	Infrastructure/ location					*		*	*	*	*		
	Internet access and connectivity					*							*
	Research and Development								*	*			



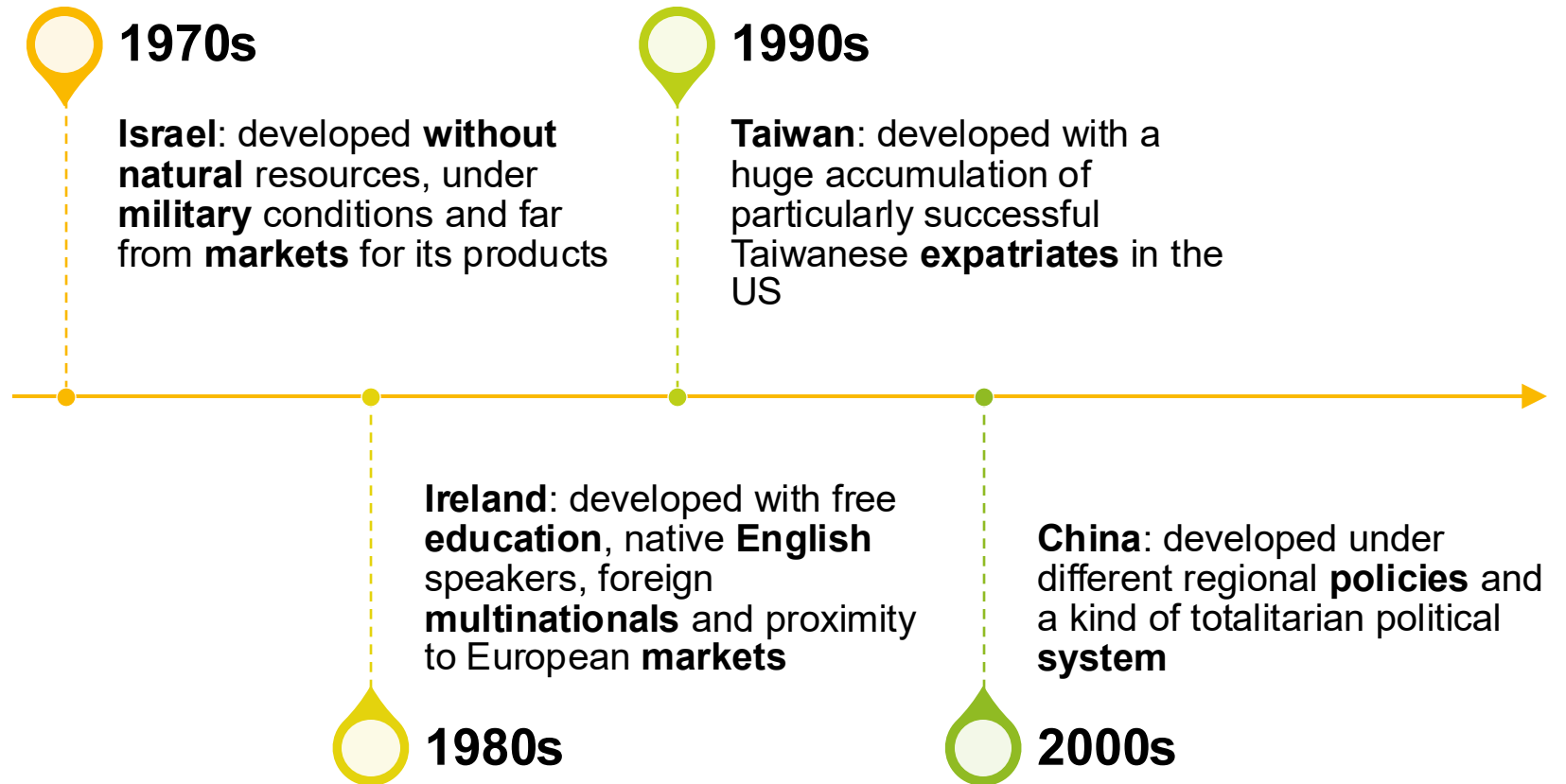
EEs are **recognized** where there are high levels of entrepreneurship  
Only a **list of relevant factors** without clarity on **interrelations** and mechanisms (Isenberg, 2010)  
**Scope** of analyses

**Competitive** region/country (Porter, 1990)  
High **productivity** (Krugman, 1996)  
**Innovation**, new business **starts**, job **growth**, progress for society (Feld, 2012)





# Entrepreneurial Context A replica of Silicon Valley? Each EEs is unique



So?

- **Education**, the **regulatory** framework and well-functioning **capital markets** undoubtedly have an effect on the level of entrepreneurship, but in the **long run and at lower degree**
- **Larger effect** is exerted by **many variables** that together influence
- **Good examples-catalysts** of the process (Skype in Estonia; Scitex and Elscint in Israel; Shockley, Fairchild and HP helping create Silicon Valley, etc.)



EEs becomes (relatively) "*self-sufficient*"

- Success breeds **success**
- **Declining** role of the state
- Once the six domains are sufficiently reinforced - **mutual** consequential influence
- **Sustainability** of programmes (*self-liquidating*)

natural  
or “build”

Result of "*Intelligent Evolution*", a process of combining the **invisible hand** of the market and the **supportive hand of public leadership**, informed by when and how to lead and ensure through **reproduction** the **sustainability** of the system

# Hadjitchoneva's Model (2022)

GCI | GII  
GEI | GEM | Eurostat  
NSI | WB | OECD  
Statista | Crunchbase |  
Trademap | Others

**Study of statistics and  
synthetic indices on entrepreneurship and  
innovation, complementing data on  
components of the entrepreneurship and innovation  
ecosystems**

Institutions | NGOs | Business  
Sofia Technopark | Technology and Industrial Park  
Politics and governance | Education | R&D | Patents

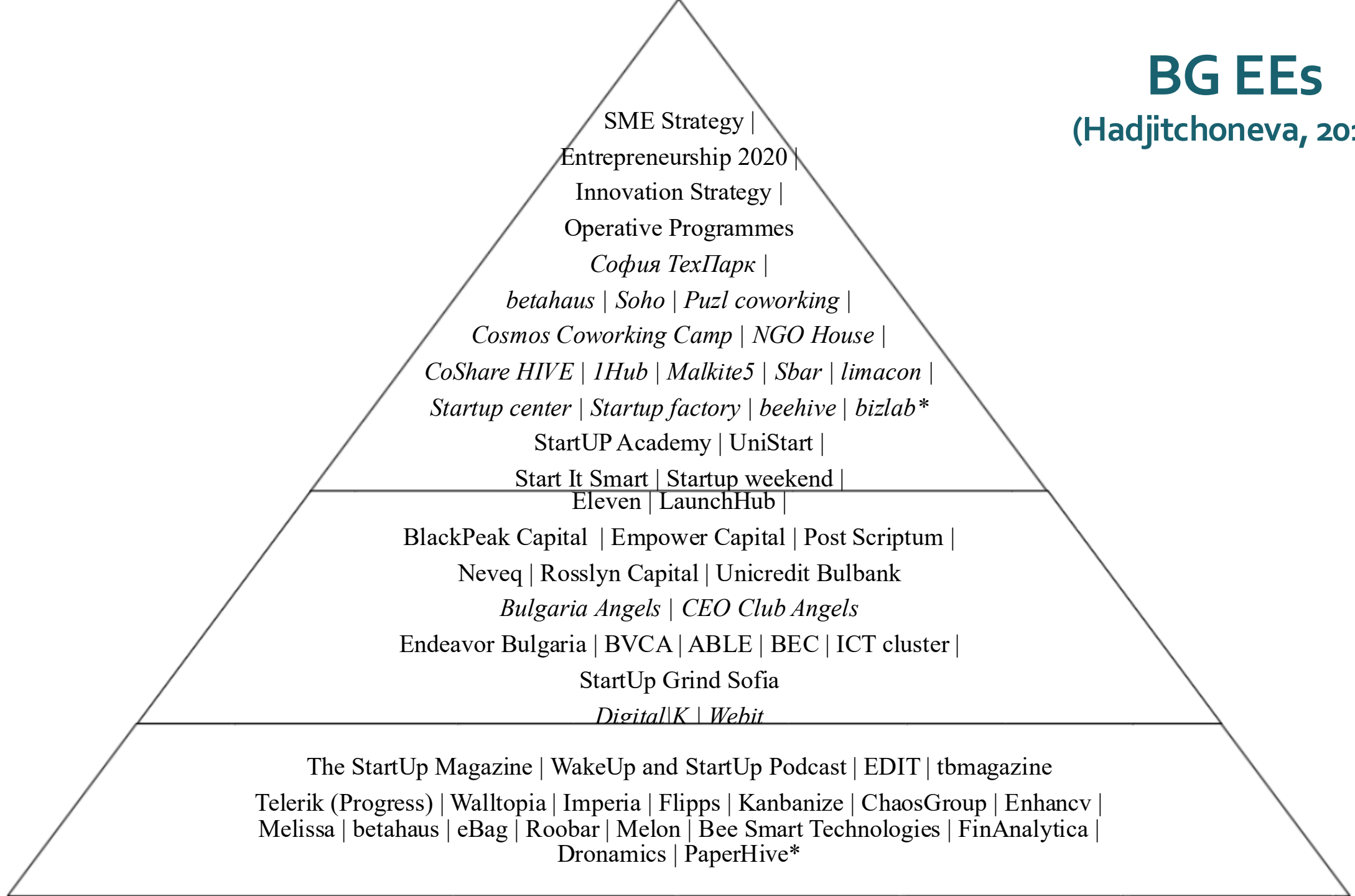
**Study of institutional and non-institutional stakeholders  
in the innovation ecosystem**

Culture | Role Models of entrepreneurship | Mentors | Talent | Mentors and  
models | Capital for investment | Policy and governance | University |  
Infrastructure | Supporting services | Open shops

**Empirical study of cultural, social and material characteristics of the  
business ecosystem**

# BG EEs

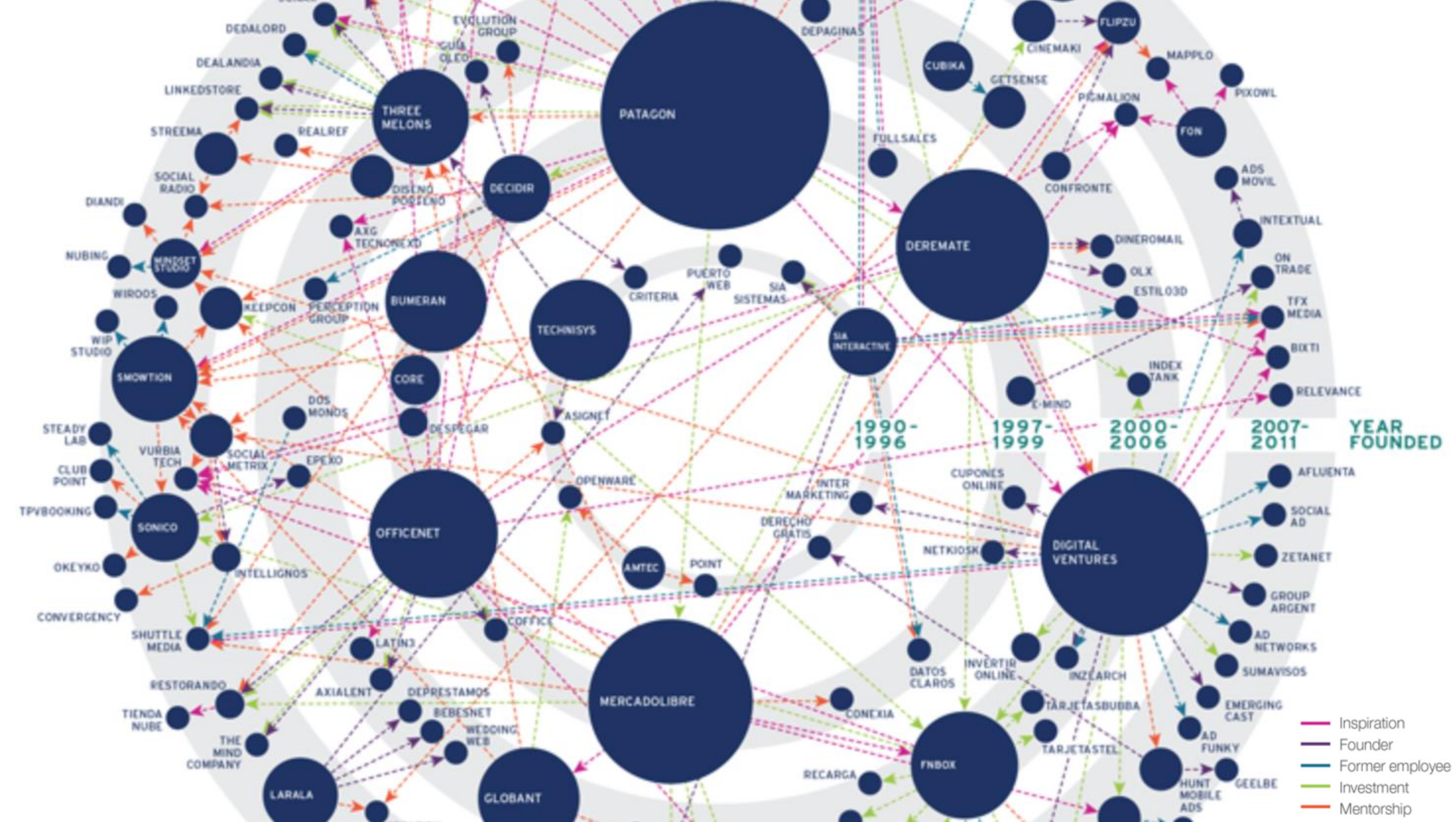
(Hadjitchoneva, 2018)



## 4 years later?

- overall, **no significant change**
- more developed and diversified first tier – **new players** (BeMe, FoodObox...), **scale-up** of start-ups created in 2012-2016, **IPO** (Dronamics), **exit** (Metrilo )...
- **Bulgarian Innovation Hub**
- updated government **policies** post 2020-2021 or in process
- Fund of **Funds** (2015)
- First Bulgarian **Unicorn** (*Payhawk*)







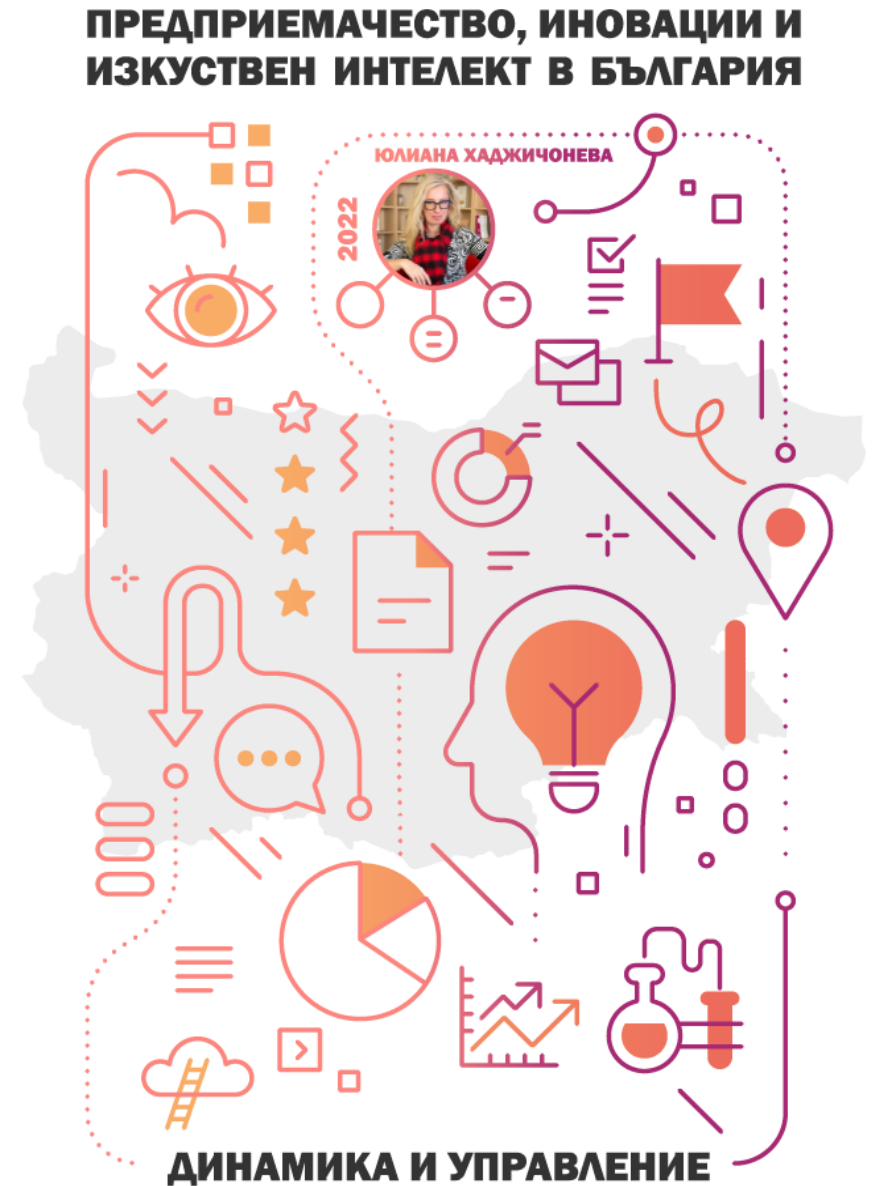





**TO DO**  
15 minutes

- Teams by nations
- Your EEs Analysis
- Your Star?
- Influencing factors?
- Drivers of Entrepreneurial Activity?

- Hadjitchoneva, J. (2022). *Entrepreneurship, Innovation and Artificial Intelligence in Bulgaria - Dynamics and Management*. Sofia: UNWE.
- WEF. (2022). *Entrepreneurial ecosystems around the globe* [online].





A background image showing a hand typing on a keyboard, with a large, 3D cardboard '@' symbol in the foreground. The image is dimmed to serve as a background for text.

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