



# Innovative startups and venture capital



- **Innovative startups** are key drivers of innovation, job creation, and economic development (e.g. Audretsch and Keilbach, 2004; 2005; Criscuolo et al., 2014)
  - They need substantial financial resources to grow and scale-up their operations
- **Venture Capital (VC)** is an important source of funding for innovative startups
  - **Smart money**: strategic, technical, marketing, and managerial support besides money

- In recent years, both European Governments and the European Commission have devoted **increasing attention to innovative startups and the development of VC** through several policy initiatives
- A few examples:
  - EIF's Funds-of Funds and Guarantee Debt funds
  - European Council for Innovation's Plan within Horizon Europe
  - National GVC initiatives (e.g., BPI France, Invitalia)

# The role of geography

# RISIS



- Entrepreneurs in different geographical areas and countries face considerably **different VC market conditions**
- **VC activity tends to be concentrated** in a few preferred locations (VC hubs), typically around economically and financially developed metropolitan areas
  - Silicon Valley, Boston, and New York City in the U.S. (e.g. Lindgaard Christensen, 2007, Chen et al., 2010; Cumming and Dai, 2010)

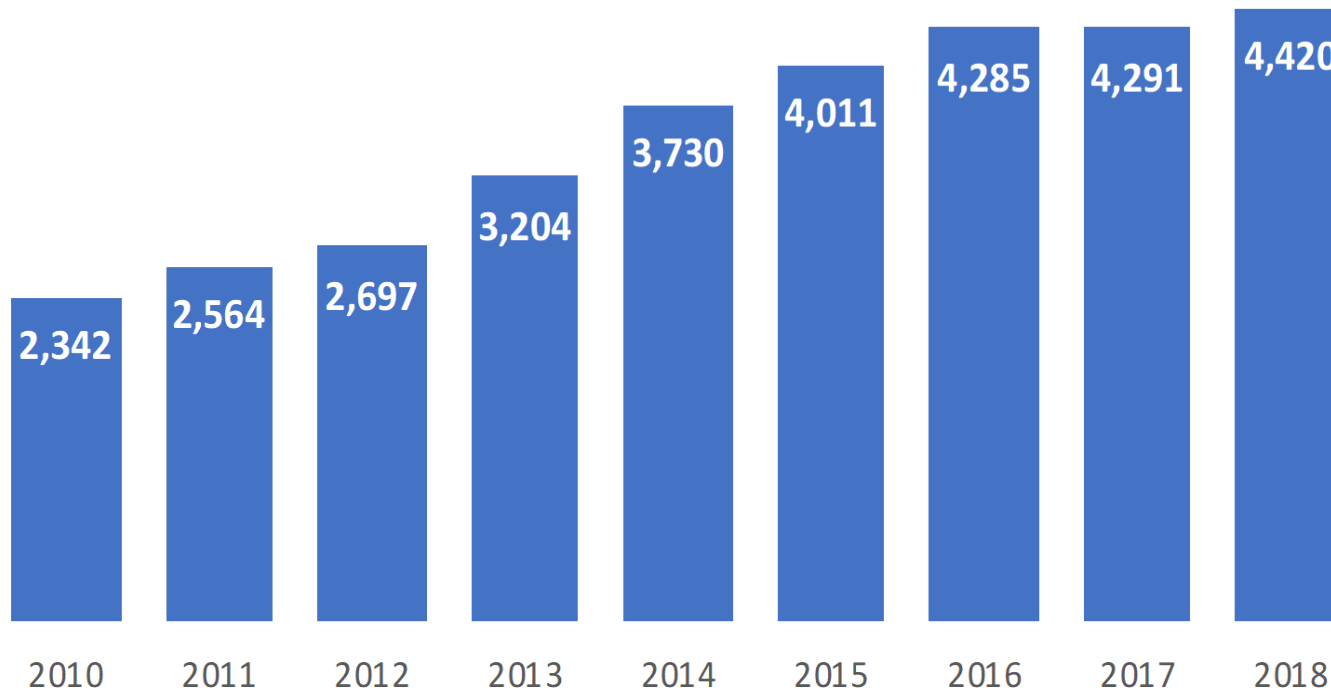
# This policy brief

- How is evolving the **geographical distribution** of VC in Europe?
- Is **VC activity agglomerated** around a few preferred locations?
- What about VC investments in more **peripheral areas**?
- Are we observing an **increased dispersion of VC activity** outside large metropolitan areas?
- Are there new, **emerging VC hubs**?
- Are there **differences across sectors**?

- **RISIS-VICO** is a dataset featuring geographical, industry and accounting information on innovative startups that:
  - Have received at least one VC investment from 1998 to 2018
  - Operate in the 27 European Union countries, United Kingdom and Israel
- We use the **VC deal** as the unit of analysis of the present report
  - 31,544 VC deals in the period **2010-2018**

# Number of VC deals by investment year

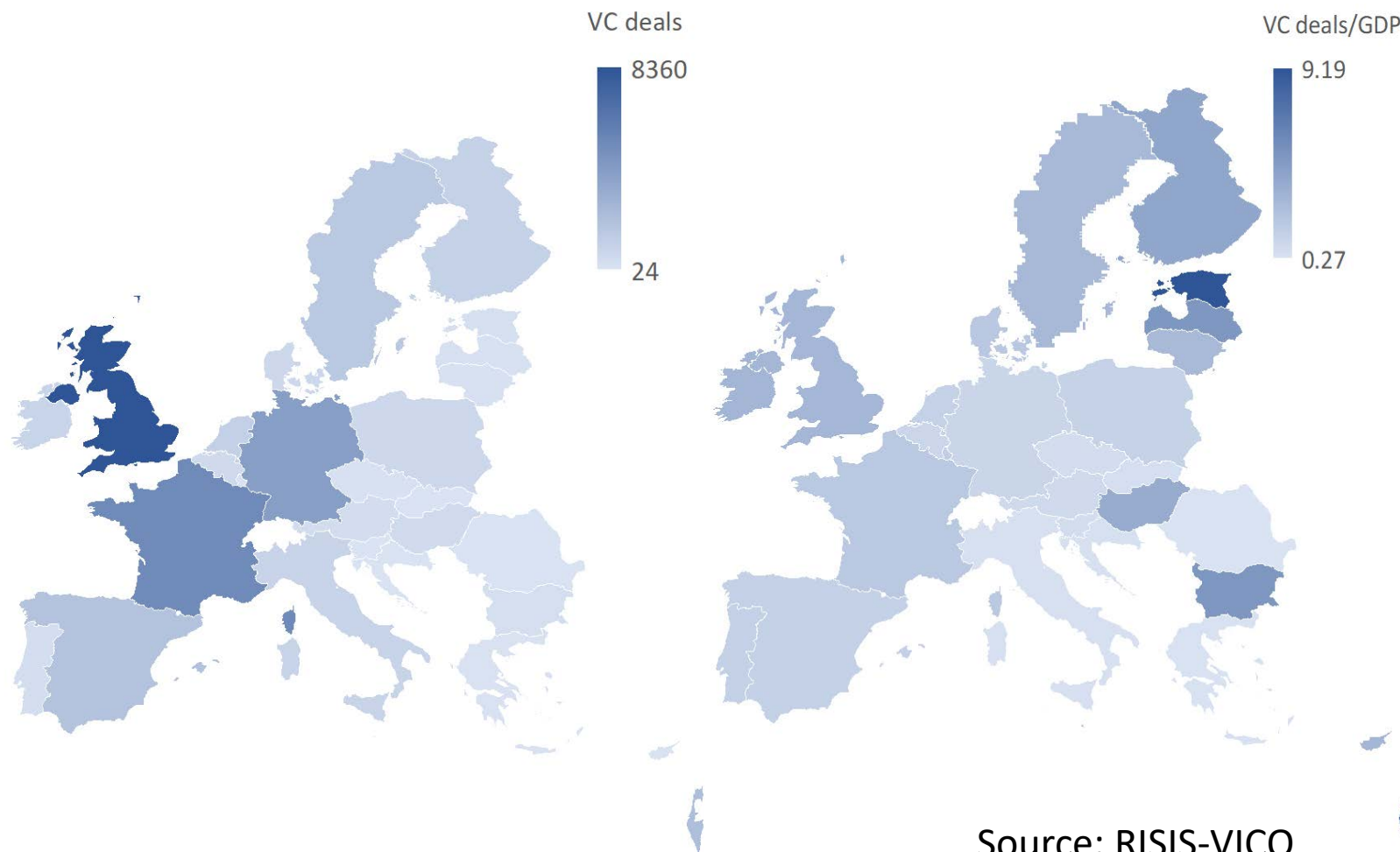
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Source: RISIS-VICO

# Number and incidence of VC deals by country

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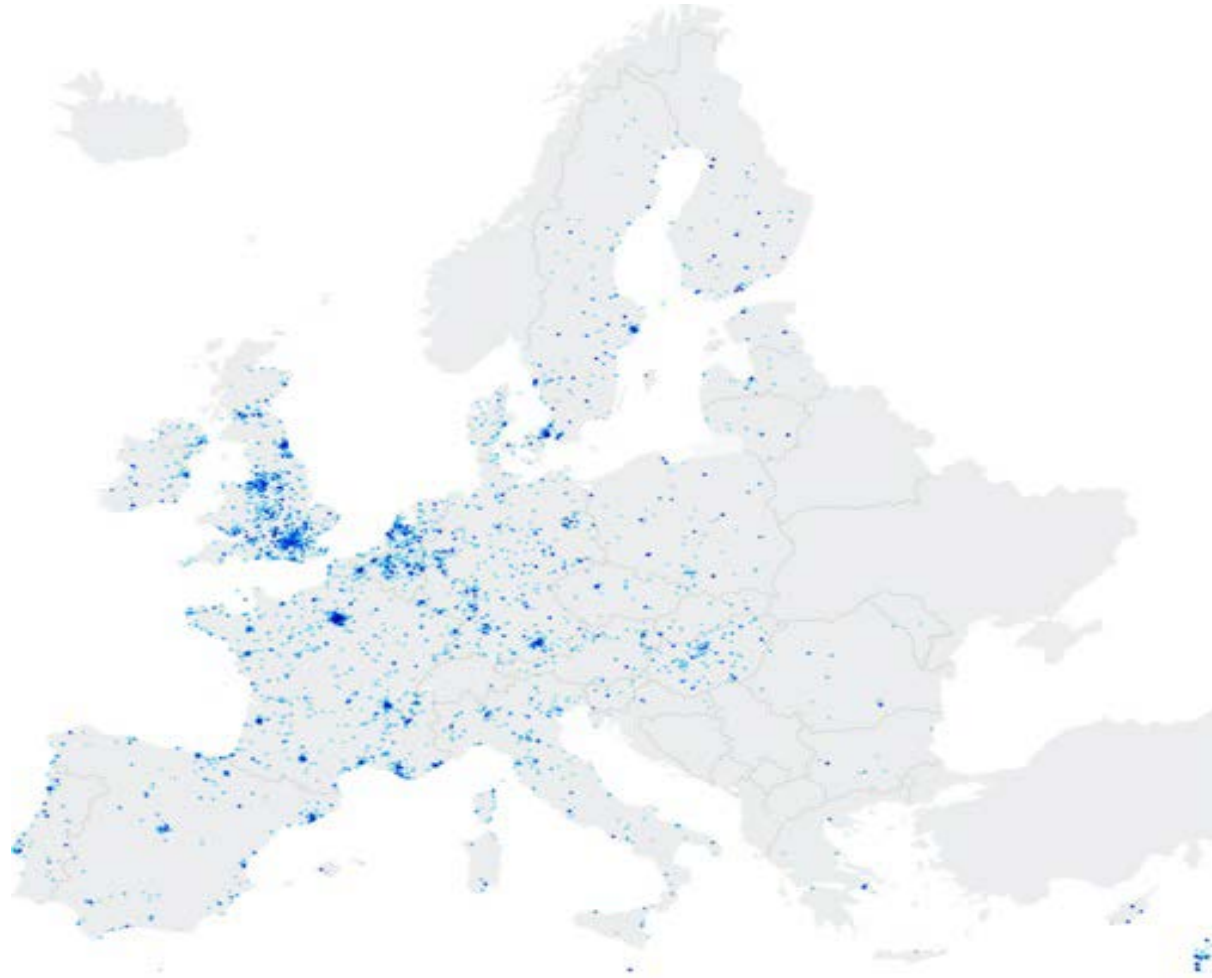


Source: RISIS-VICO



# Geographical dispersion of VC deals

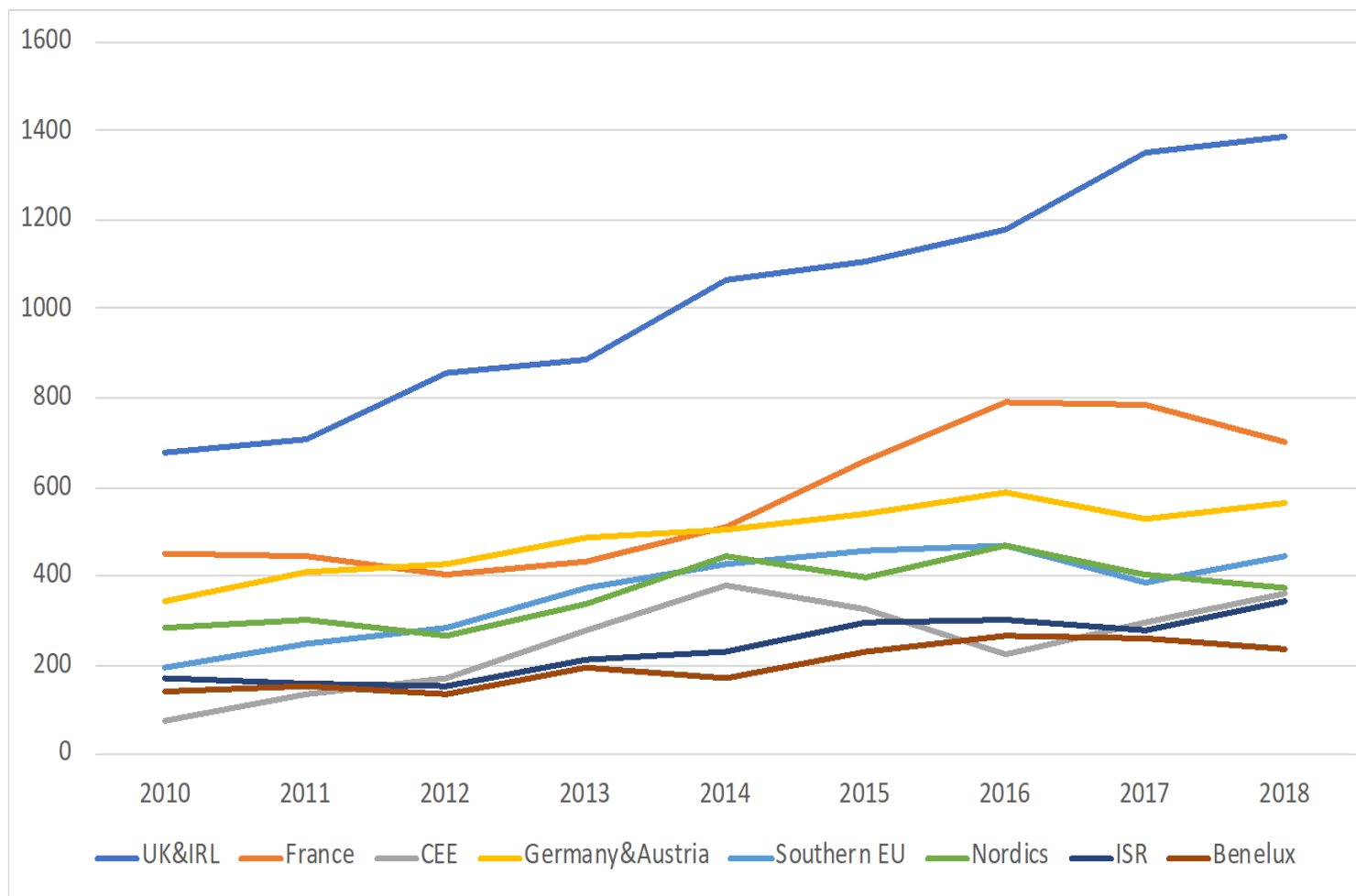
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Source: RISIS-VICO

# VC deals across EU macro-regions

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Source: RISIS-VICO

# Analysis of agglomeration patterns

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- **38 Large Metropolitan Areas (LMAs)**
  - Urban areas with more than 1.5 million inhabitants
- **251 Metropolitan Areas (MAs)**
  - Urban areas between 250,000 and 1.5 million inhabitants
- **633 Medium-sized, Small and Rural Areas (MSRAs)**
  - Urban and rural areas with less than 250,000 inhabitants

# Concentration in LMAs

	Number	% population	% VC deals	% deals / %population
Large Metropolitan Areas	38	31.9%	60.6%	1.9
Metropolitan Areas	251	32.3%	25.3%	0.8
Medium, Small & Rural Areas	633	35.8%	14.0%	0.4

Source: RISIS-VICO

# VC deals & urban areas across time

# RISIS

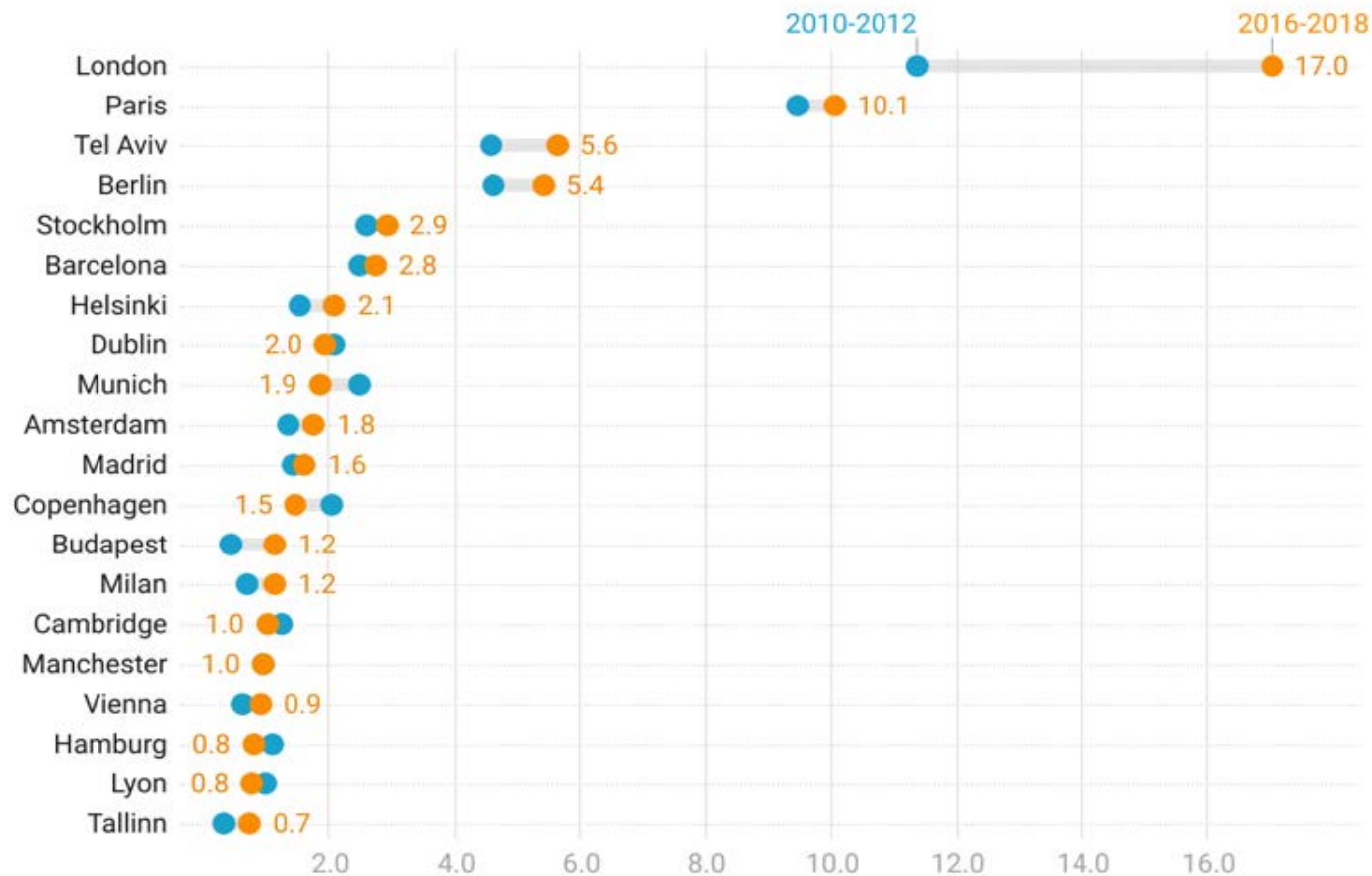


	2010-2012	2013-2015	2016-2018
Large Metropolitan Areas	56.8%	58.6%	64.5%
Metropolitan Areas	26.7%	26.8%	23.4%
Medium, Small & Rural Areas	16.5%	14.6%	12.1%

Source: RISIS-VICO

# Distribution of VC deals in top 20 VC hubs

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Source: RISIS-VICO

- **Software, Internet & TLC (S&I)**
  - 40% of VC deals in the 2010-2018 period
- **Life Science (LS)**
  - 10% of VC deals in the 2010-2018 period
- **R&D and engineering (R&D)**
  - 9.5% of VC deals in the 2010-2018 period

# VC deals & urban areas by sector



	S&I	LS	R&D
Large Metropolitan Areas	62.5%	48.5%	41.7%
Metropolitan Areas	27.3%	31.0%	36.5%
Medium, Small & Rural Areas	10.2%	20.6%	21.8%

Source: RISIS-VICO



# LMAAs & sectors across time (%VC deals/%population)

# RISIS

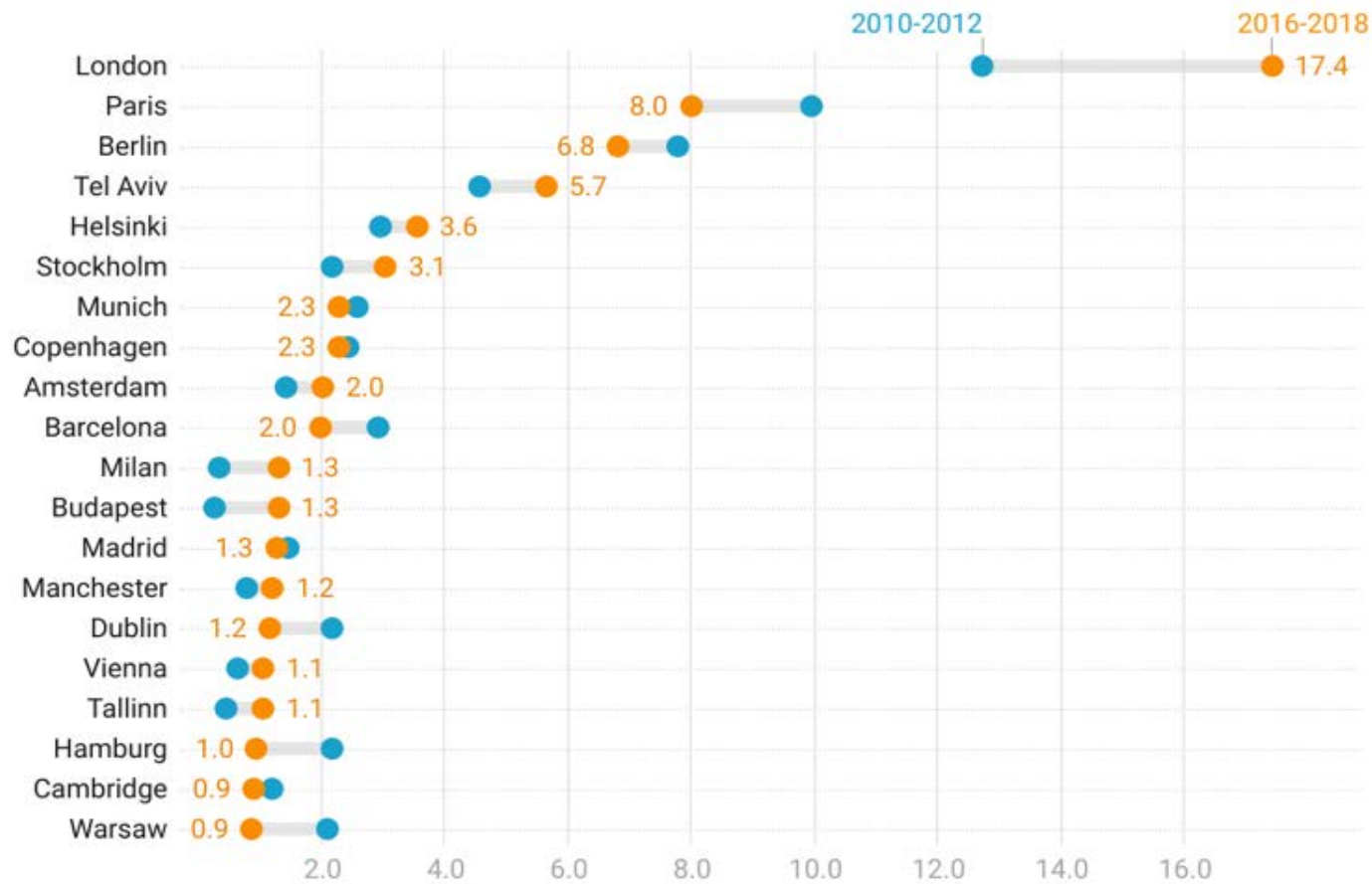


	2010-2012	2013-2015	2016-2018
S&I	1.19	1.27	1.43
LS	0.86	0.83	0.88
R&D	0.66	0.70	0.77

Source: RISIS-VICO

# Distribution of VC deals in top 20 VC hubs - S&I

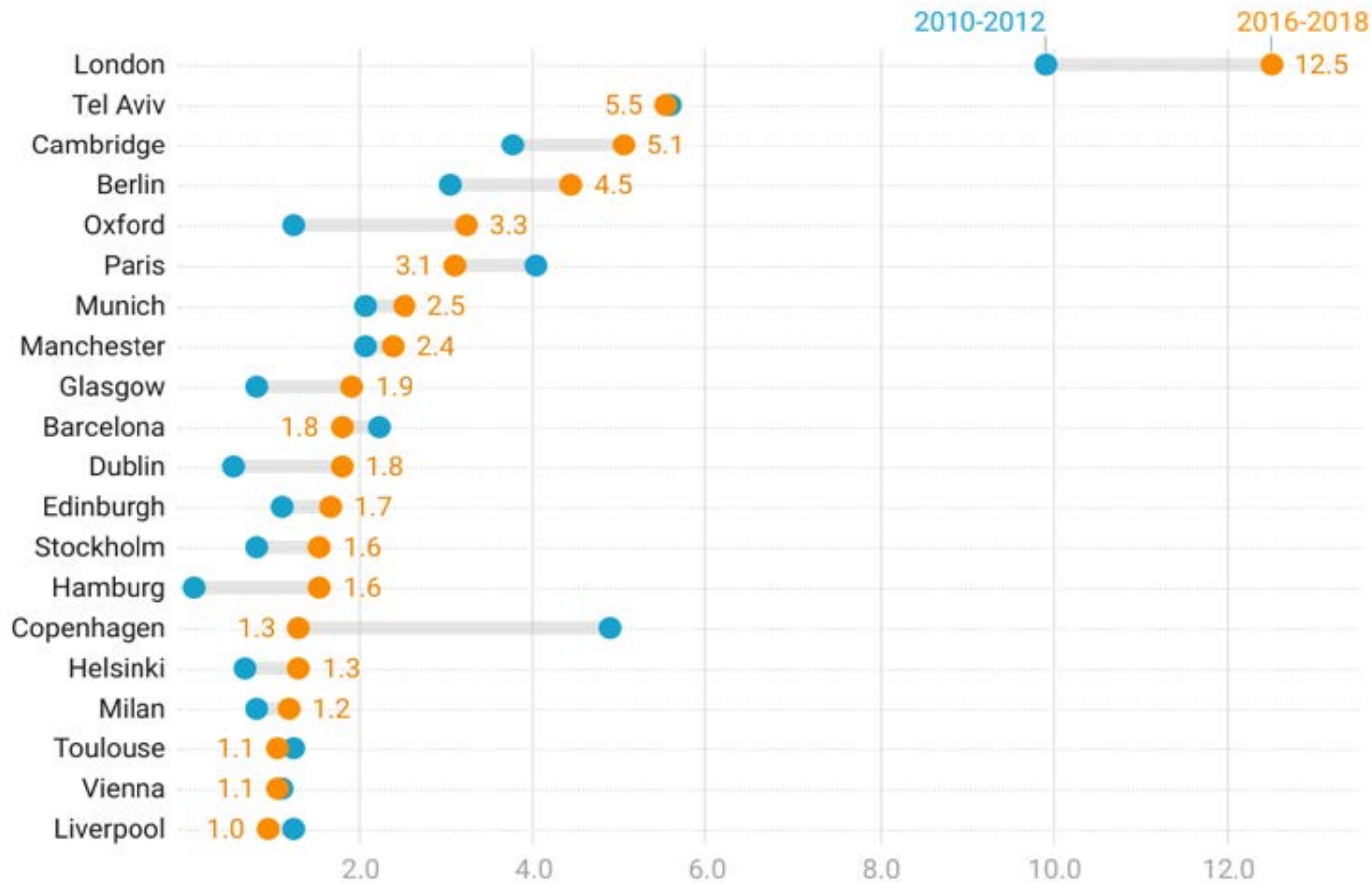
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Source: RISIS-VICO

# Distribution of VC deals in top 20 VC hubs - LS

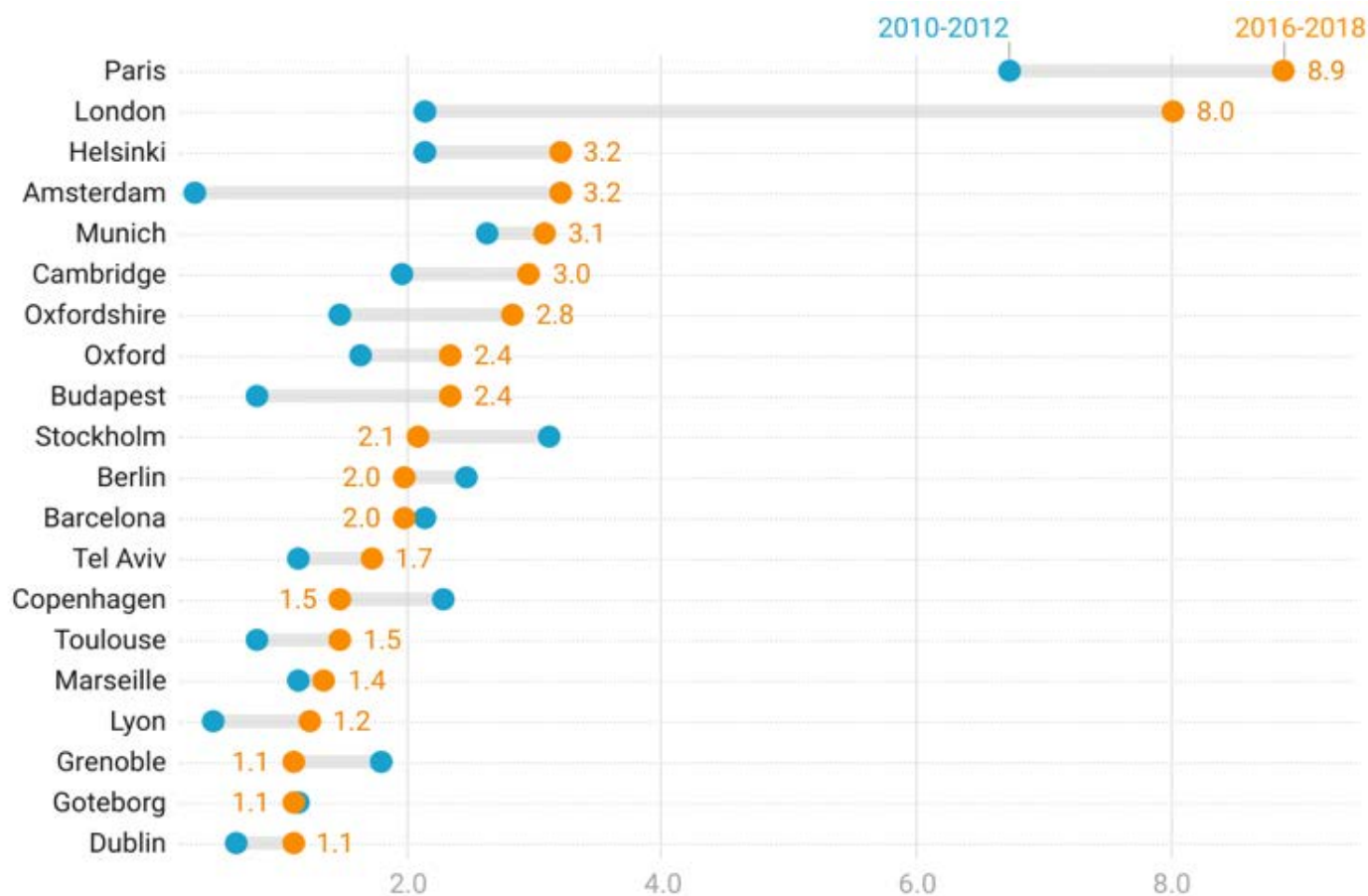
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Source: RISIS-VICO

# Distribution of VC deals in top 20 VC hubs - RD

# RISIS



Source: RISIS-VICO

# Key findings

- VC deals are unevenly distributed across countries
  - **UK** and **France** are the most relevant VC markets
  - **Eastern European countries and Israel** show the highest incidence rates (VC deals / GDP)
- VC activity is mostly concentrated in **LMAs**
  - However a non-negligible share of VC activity in more peripheral areas
- **Increasing concentration of VC activity in LMAs from 2010 to 2018**
- Important **differences emerge across sectors**
  - LS exhibits higher dispersion of VC deals outside the main VC hubs mainly in areas with relevant knowledge creation activity

# Policy implications and discussion



- The alleged **democratization of equity finance** (through alternative channels such as equity crowdfunding) does not seem to have been reflected in the VC industry macro-trends so far
  - In well-developed VC markets such as the UK, alternative finance does not play a key role in equity finance democratization
- Role of GVC initiatives in **closing regional equity market gaps**
  - In France more dispersed investment patterns
- Policies aimed at increasing regional knowledge capacity may have an **indirect positive effect** on the **democratization of access to external equity finance**
  - LS sector is characterized by a higher dispersion of VC deals in MAs where major university centres (e.g. Cambridge, Oxford) are located

