



**POLITECNICO**  
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**RISIS**

Research infrastructure for research  
and innovation policy studies

# Overview of VICO 2.0

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# Agenda

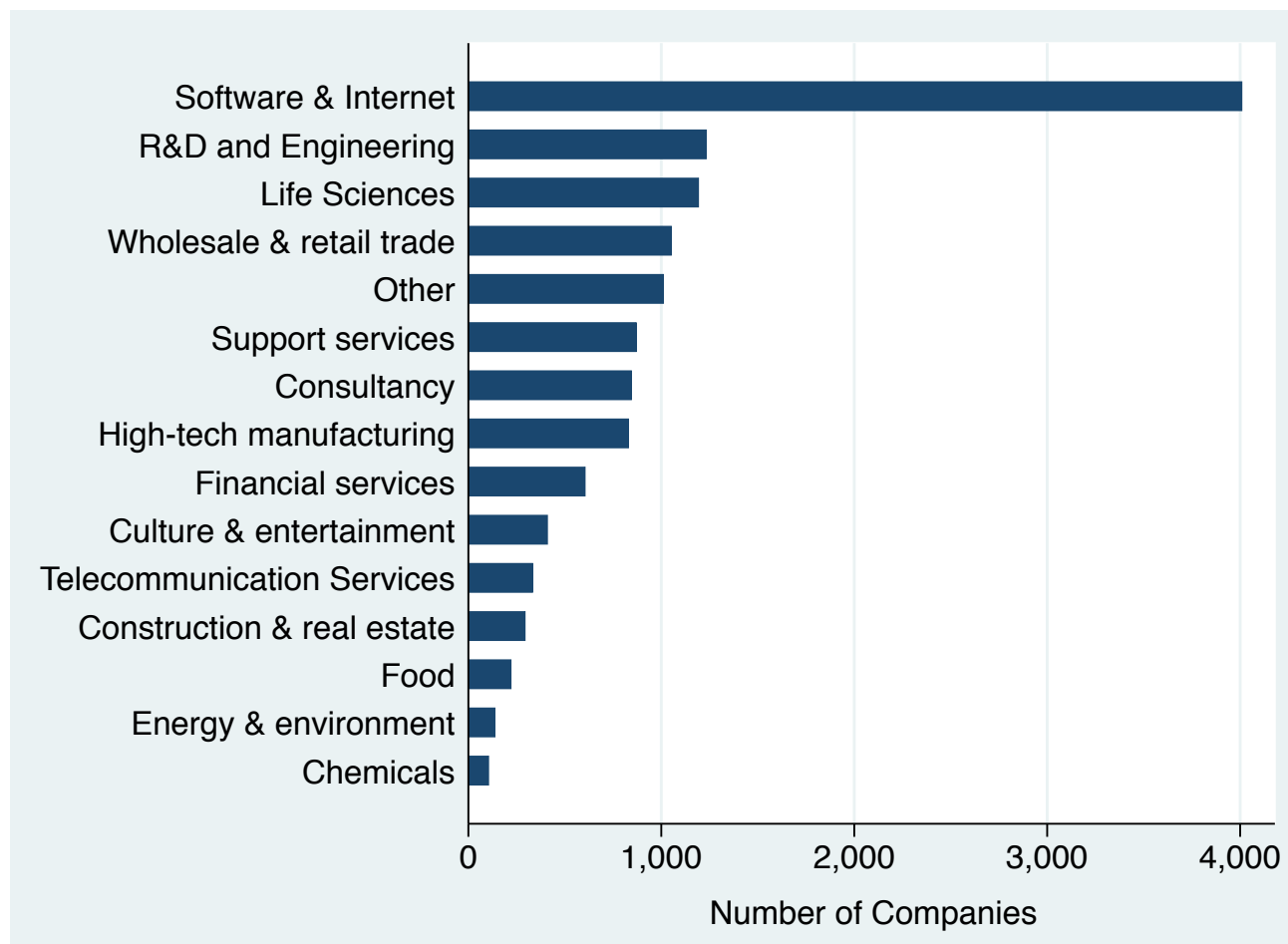
- Basic characteristics of VICO 2.0
- Content of VICO 2.0
- Technical structure of VICO 2.0
- Final remarks



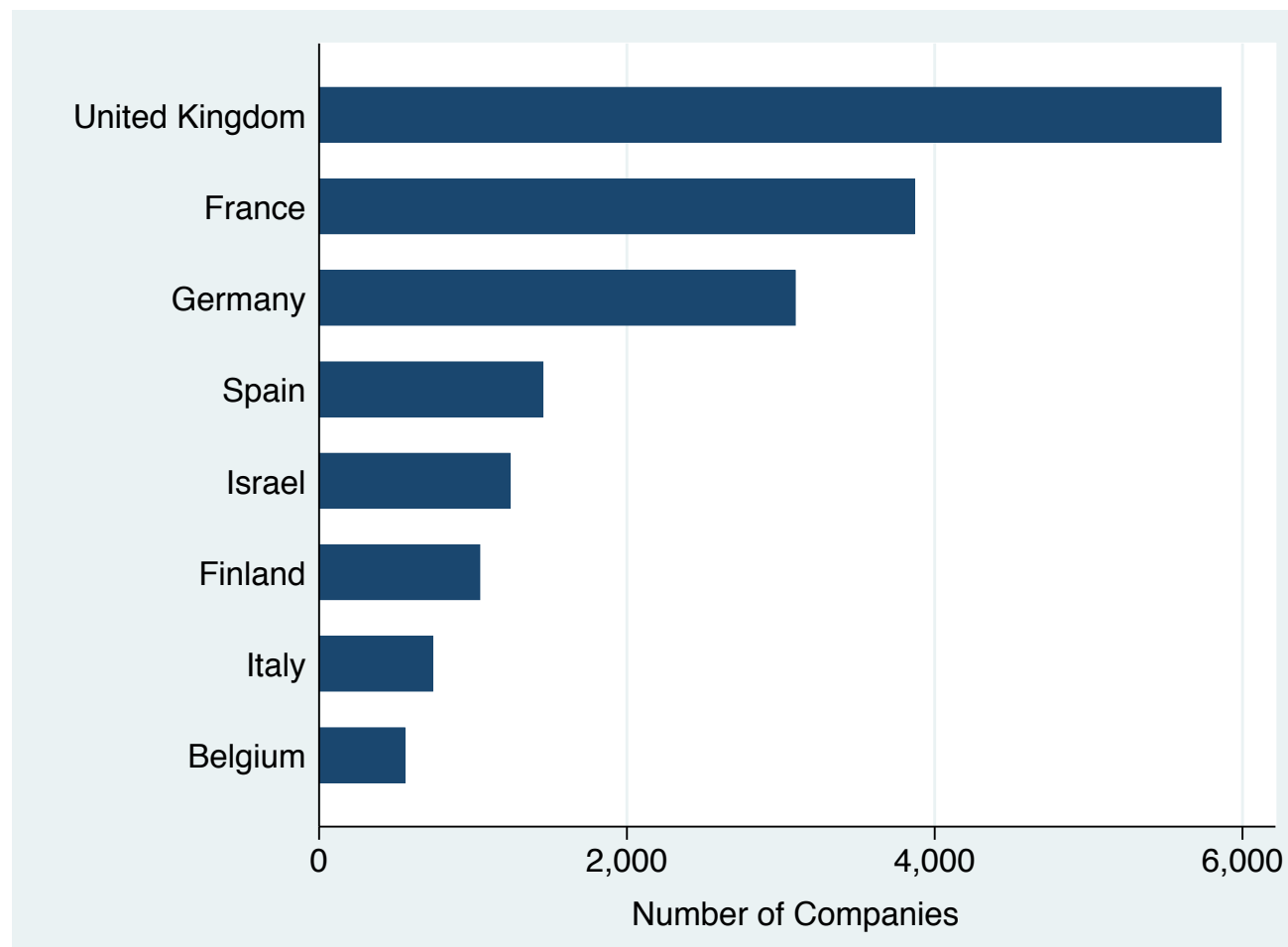
## Basic characteristics of VICO 2.0

- **VICO 2.0** contains geographical, industry and accounting information on companies:
  - Founded starting from 1/1/1988
  - Which have received at least one venture capital or angel investment starting from 1/1/1998
  - Operating in seven European countries (Belgium, Finland, France, Germany, Italy, Spain, and the United Kingdom) and Israel
- **Strengths:**
  - Overall number of companies (17,863)
  - Country coverage
  - Extent of information gathered
  - Information on 7,011 distinct investors

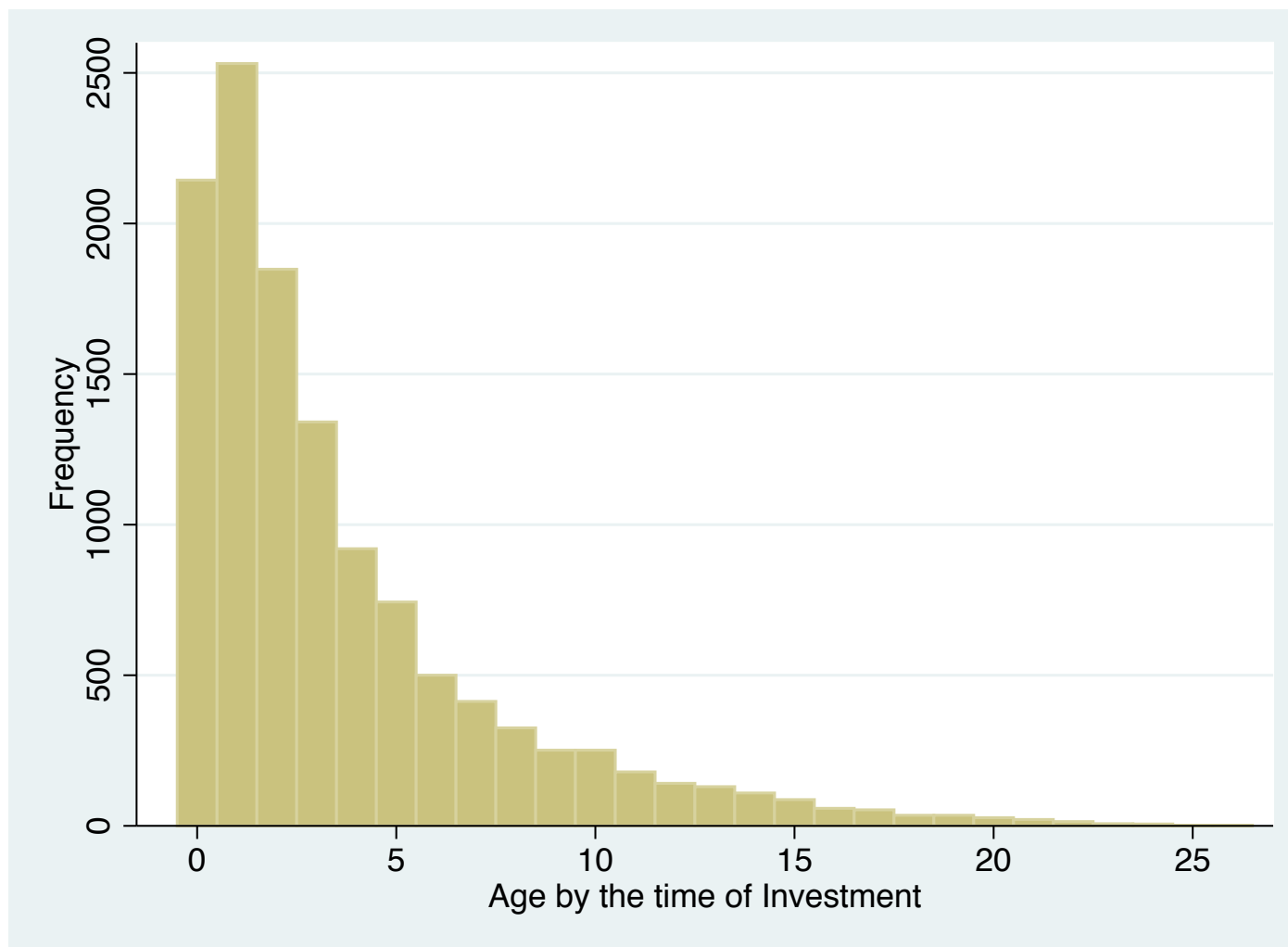
# Company distribution by industry



# Company distribution by country



# Company distribution by age at the time of the first investment

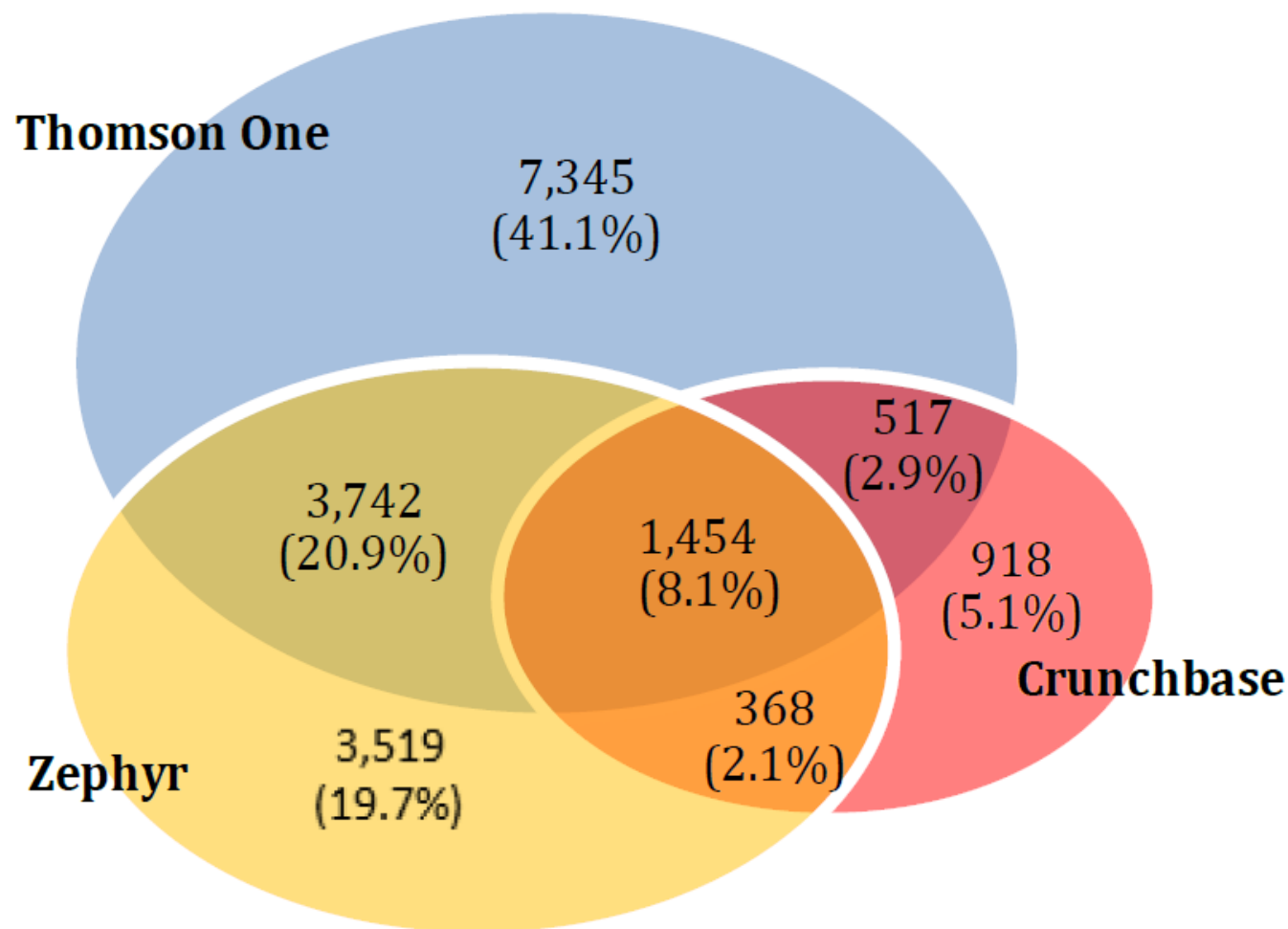


# Data sources

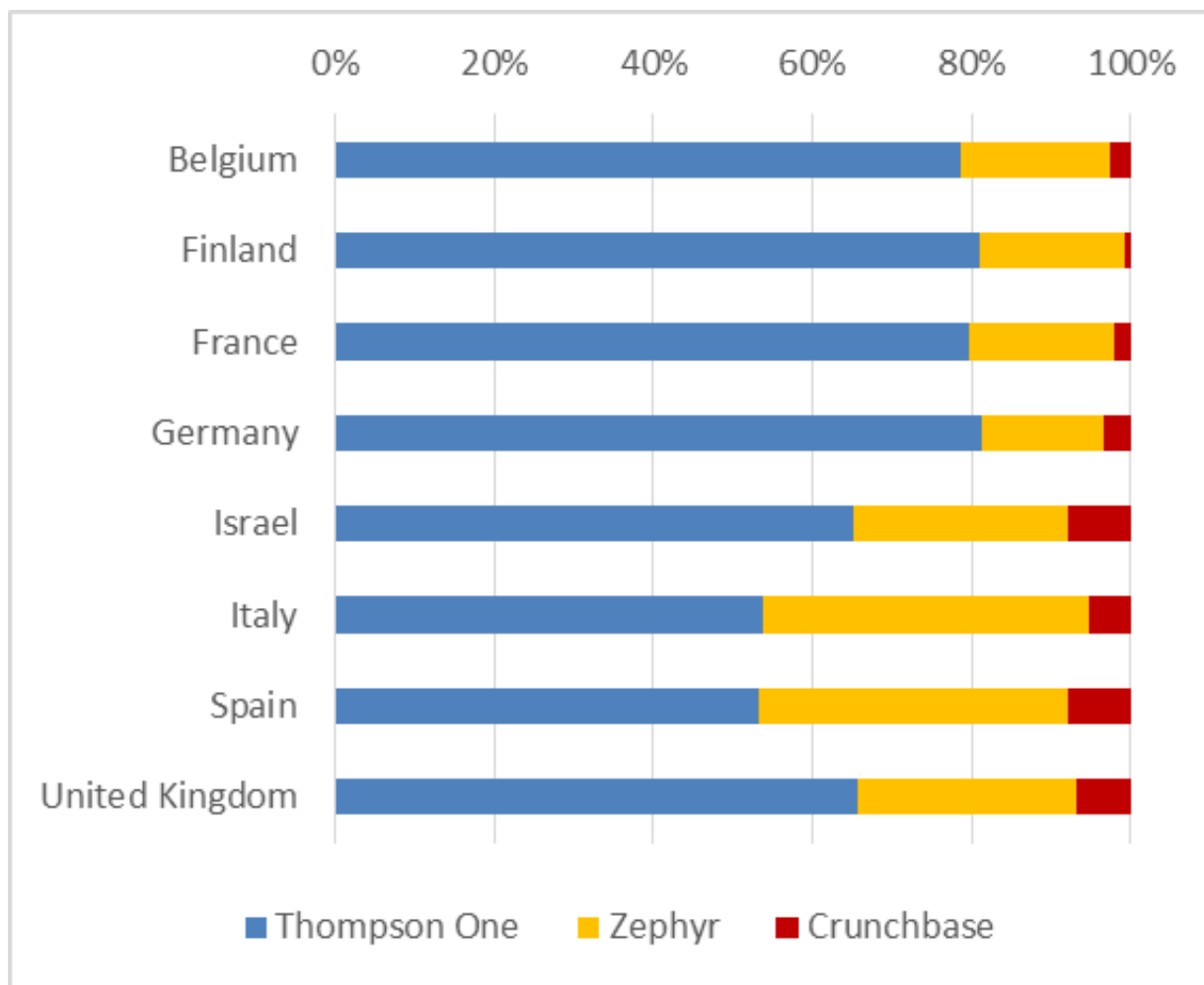
- In order to identify companies we used **three source databases**:
  - **Thompson One Private Equity**
  - **Zephyr**
  - **Crunchbase**
- We defined a unique list of companies to be included in VICO 2.0 by merging information on companies that were recorded in the three source databases
  - Companies' names were disambiguated using Excel add-on fuzzy matching and manual checks
- Additional accounting information was collected from **Orbis**
  - Accounting data are available for 14,425 companies (80.75% of the sample) from 2005 to 2014



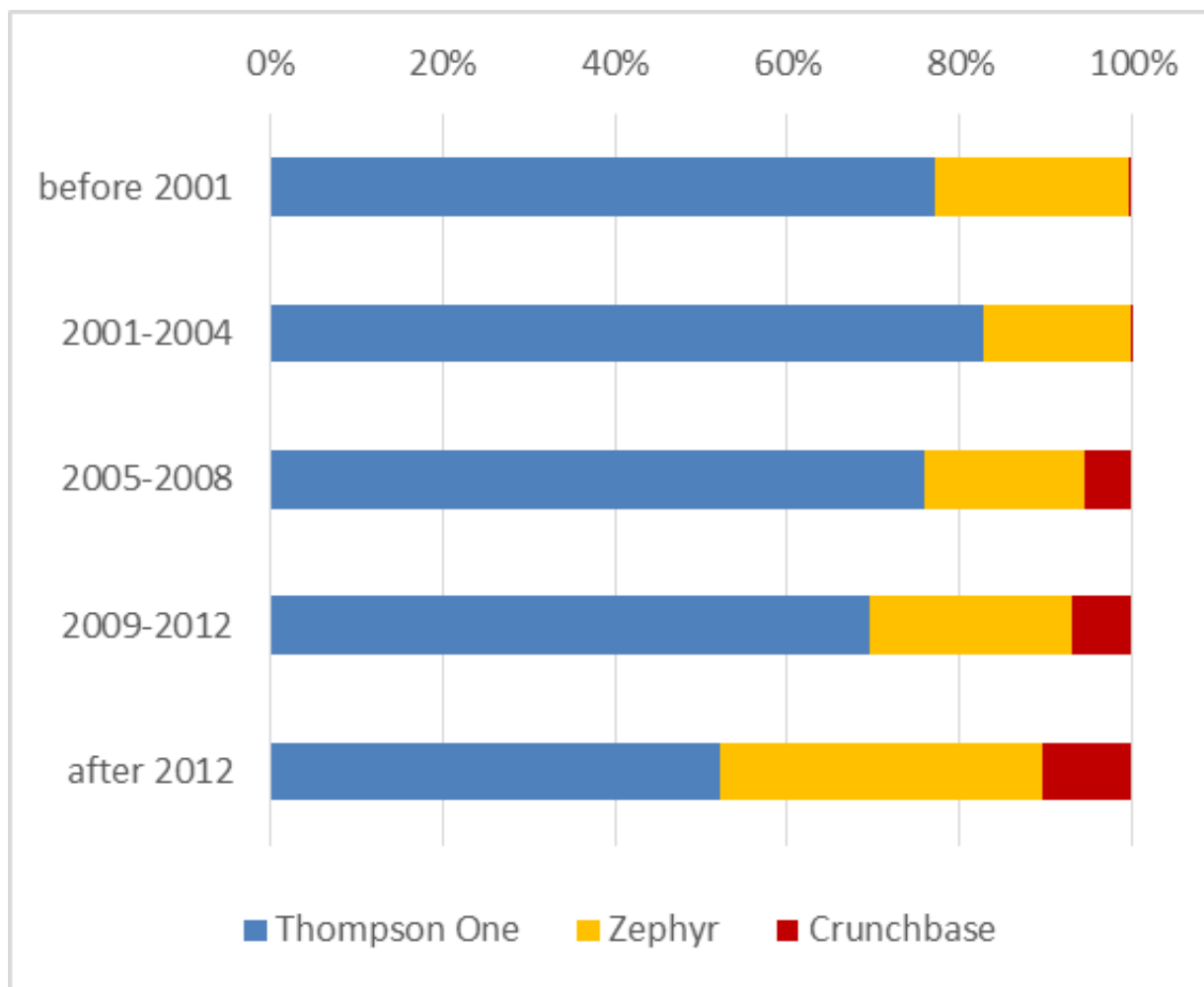
# Number of companies by data source



# Investments by company's country and data source



# Investments by investment year and data source





## **Content of VICO 2.0**

# Units and definition of observations

- Data can be broadly classified as:
  - Company-level data
    - General company information
    - Accounting data
  - Investor-level data
  - Investment-level data (deal specific)

# Company-level data

## General company information

- Company ID (Company ID code, Company Name)
- Address (Nation, City, Street, Zip Code, NUTS, FUA, Latitude, Longitude)
- Industry classification (e.g. NACE Rev. 2 codes, description, main section)
- Foundation year
- Status (active, listed, acquired, bankrupt)

# Company-level data

## Accounting data

- Income statement (e.g. Turnover, EBIT, Net profit)
- Balance sheet (e.g. Tangible assets, Intangible assets, Debt)
- Cash-flow
- Number of employees

# Investor-level data

- Investor ID (Investor ID code, Investor Name)
- Address (Nation, City, Zip Code, NUTS, FUA, Latitude, Longitude)
- Type of investor (Independent VC, Corporate VC, Bank-affiliated VC, Governmental VC, University VC; BA; Crowdfunding; Other)
- Year of foundation of the VC management company
- Industry classification (including NACE Rev. 2 codes, description, main section)



# Investment-level data

- Deal-specific information:
  - Date of the investment
  - Round number
  - Identity of investors involved in the deal
  - Total amount invested in the round

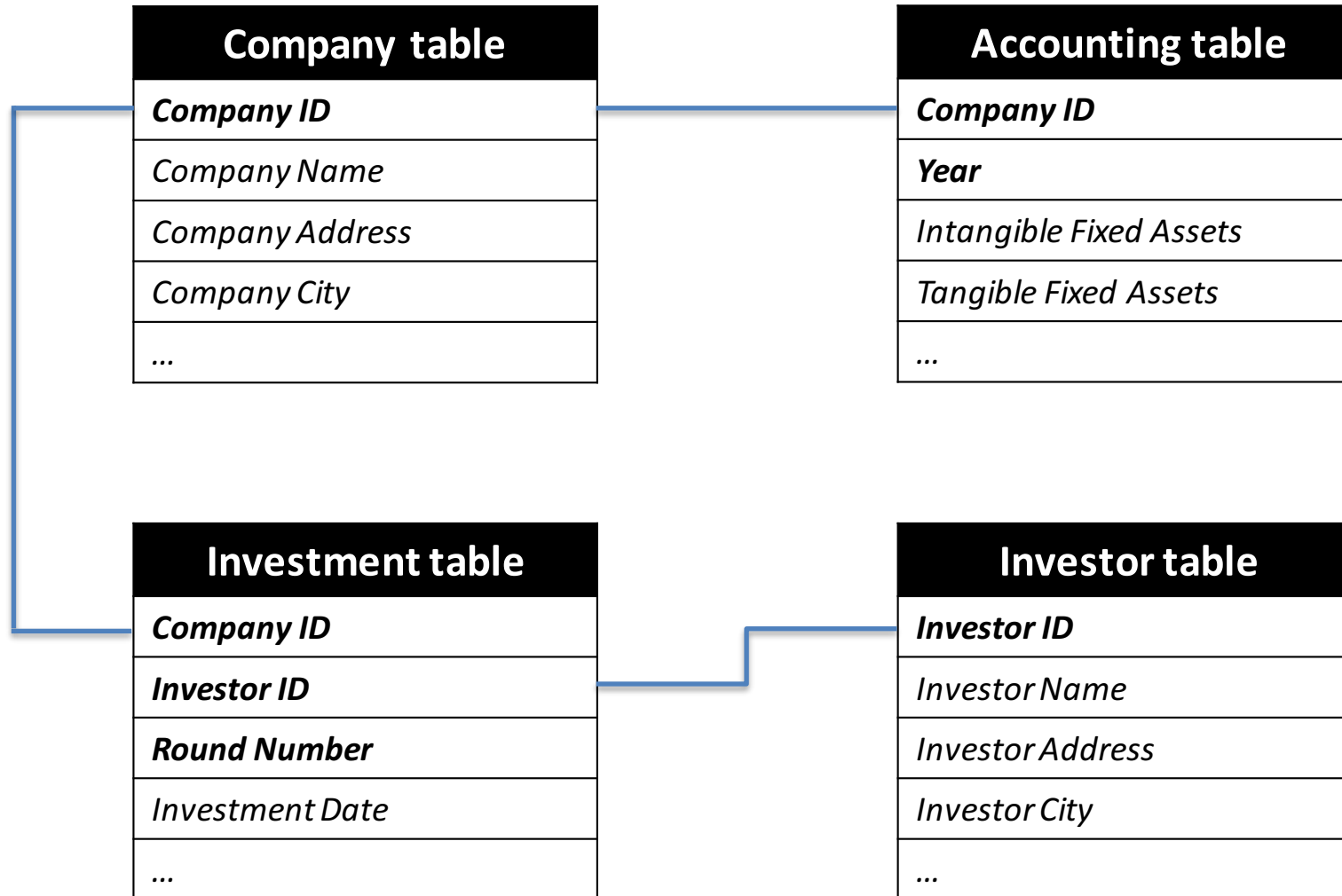


## Technical structure of VICO 2.0

# Available formats

- Microsoft Excel and STATA
- Variables are organized in 4 Tables:
  1. Company
  2. Accounting
  3. Investor
  4. Investment

# Unique identifiers and tables relations



# Codebook (example)

Variable	Type	Description
<b>InvestorID</b>	long	Encoded variable of InvestorName
InvestorStatus	string	Investor status: active or inactive (if a company)
InvestorNation	string	Investor's country
InvestorCity	string	Investor's city
InvestorFoundedYear	float	Year of foundation of the investor (if a company)
InvestorType	string	Type of investor: Independent VC; Corporate VC; Bank affiliated VC; Governmental VC; University VC; Business Angel; Crowdfunding; Other
InvestorNoofFundsManaged	int	Number of investor's funds managed (if a VC)
Investor_ISO_A2	string	Investor's ISO Alpha-2 letters code
Investor_ISO_A3	string	Investor's ISO Alpha-3 letters code
Investor_ISO_n	int	Investor's ISO numeric-3 digits code
InvestorLat	float	Investor's Latitude
InvestorLong	float	Investor's Longitude
InvestorFUA_Code	string	Investor's Functional Urban Area code
InvestorFUA_Name	string	Investor's Functional Urban Area name
InvestorNUTS3	string	Investor's Nomenclature of Territorial Units level 3
InvestorNUTS2	string	Investor's Nomenclature of Territorial Units level 2
InvestorNUTS1	string	Investor's Nomenclature of Territorial Units level 1
InvestorStateUSA	string	Investor's USA state (if Investor's Nation=Unites States)

# Merging tables

- From the 4 tables we can derive different STATA datasets that can be used for research purposes
- Example 1: Panel data on companies with accounting information and investments received in each year
- Example 2: Investments with information on companies and investors
- ...

# Example 2

var62[1]						
	CompanyID	RoundNumber	InvestorID	InvestorType	d_Undiscov	
1	VIC01	1	VIC0Investor02026	IVC	.	
2	VIC010	1	VIC0Investor01211	IVC	.	
3	VIC010	2	VIC0Investor01211	IVC	.	
4	VIC010	3			1	
5	VIC010	4	VIC0Investor01394	BVC	.	
6	VIC010	4	VIC0Investor01211	IVC	.	
7	VIC0100	1	VIC0Investor06246	IVC	.	
8	VIC01000	1			1	
9	VIC01000	1	VIC0Investor08215	IVC	.	
10	VIC010000	1	VIC0Investor08131	IVC	.	
11	VIC010001	1	VIC0Investor01565	IVC	.	
12	VIC010002	1	VIC0Investor01279	IVC	.	
13	VIC010002	2	VIC0Investor01279	IVC	.	
14	VIC010002	3			1	
15	VIC010002	4	VIC0Investor01279	IVC	.	
16	VIC010003	1	VIC0Investor08448	BVC	.	
17	VIC010004	1	VIC0Investor03328	IVC	.	
18	VIC010004	2	VIC0Investor07545	IVC	.	
19	VIC010004	2			1	
20	VIC010004	3	VIC0Investor07545	IVC	.	
21	VIC010004	3	VIC0Investor03657	IVC	.	
22	VIC010004	3	VIC0Investor03328	IVC	.	
23	VIC010004	3	VIC0Investor03640	BVC	.	
24	VIC010005	1	VIC0Investor00731	IVC	.	
25	VIC010007	1	VIC0Investor00699	IVC	.	

Vars: 5 of 55 Order: Modified      Obs: 52.657



## Final remarks



# Extensions and improvements of VICO 2.0

- Double check of investor type information
- Information on other EU-28 countries
- Patent information
- Information on company's founders/management team
- Control group of non-VC backed companies
- ...