ESCoE project 3: An application of the bottom-up industrial taxonomy

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Recap

In v1 of the project we analysed the limitations of the SIC taxonomy and prototyped and validated a new version using business website (glass.ai) data.

Our analysis suggested several valuable applications.

- Decomposing uninformative SIC codes

- Mapping new / policy relevant bottom-up sectors

- Characterising local economies at a higher level of resolution

We also flagged some areas for improvement in the taxonomy:

- Uninformative and duplicated sectors

- No confidence measures to include companies in a sector

- Hard to interpret sector names

- Taxonomy only applied to a subset of the glass data

Community
6 2
5 1
4 0
3

Number of companies
10,000   20,000   30,000   40,000

Number of links
1
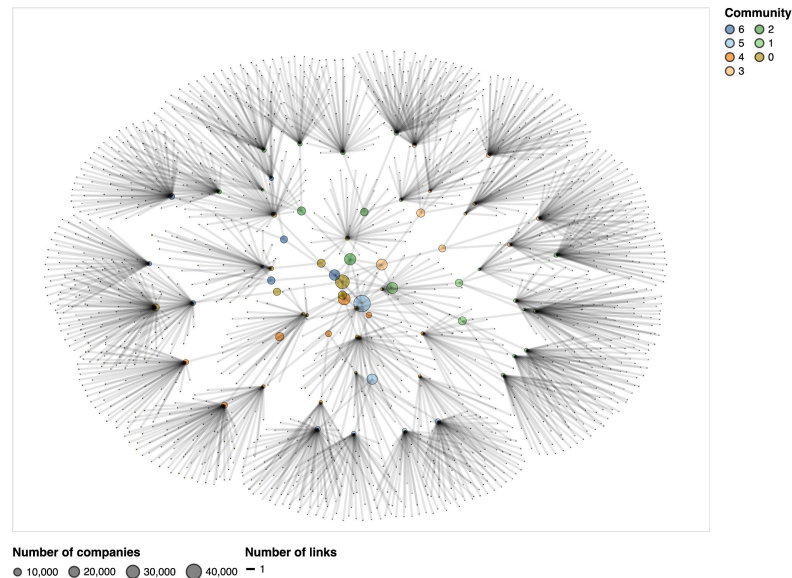
We propose to split the new project into two phases:

1. Polish the taxonomy

2. Explore and apply the taxonomy

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Project phases

Phase 1: Upgrade the taxonomy

- Update and rerun pipeline including smaller sectors

- Remove uninformative sectors

- Generate confidence measures for company inclusion in sector

- Apply taxonomy to all glass companies

Start 1 November 2021

Finish 30 November 2021

Phase 2: Explore and apply the taxonomy

Some options:

1. Sectoral analysis

2. Geographical analysis

3. Performance analysis after matching with IDBR (by ONS)

4. ...

After a short exploration we would select one application area with ONS

Start 1 December 2021 (select application before end 2021)

Finish 31st January 2022

Phase 3: Write up results

- Validate results (workshop)

- Write report

- Refactor code

Start 1 February 2022

Finish 28 February 2022

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A bit more on the application ideas...

Sectoral analysis

Use the taxonomy to identify and analyse an interesting sector like AI, sustainable and green goods...

- Where is it in the SIC taxonomy?

- What is it geography?

- What can we learn about its value chain?

Place-based analysis

Use the taxonomy to characterise the industrial composition of different regions...

- What are the sectoral differences between high productivity and low productivity regions?

- How much new information does the bottom-up taxonomy yield vs SIC?

Performance analysis

Match company data with IDBR micro-data & study their performance...

- What are the levels of employment / turnover growth in different sectors?

We assume that this matching & descriptive analysis would be done by the IDBR team (no time to apply / use SRS in the timeline of this project)
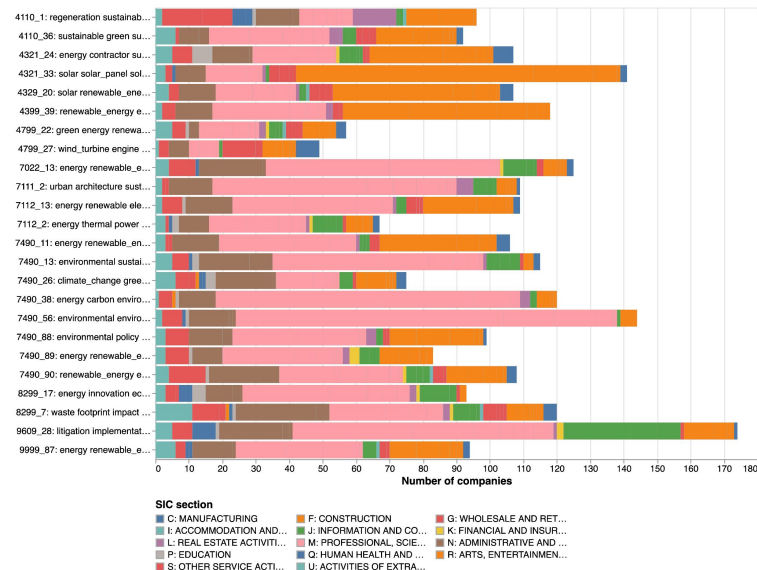
These analyses could yield relevant evidence to inform levelling up policy agendas.