

CompNet's 6th Vintage: investigating cross country comparability

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Assessing the reliability of the CompNet database for policy analysis and research:

Coverage, representativeness and cross-EU countries comparability.

Main findings of the report

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CompNet Workshop, ECB, Frankfurt, 26 April 2018

Justification and aim of the working group

Justification:

- With the enlargement of the country coverage we will eventually reach inclusion of 19 countries.
- In this report 36 sources are used by 15 data providers
- More diversity in sources, but also more diverse skills in the network, to address the issue of comparability

Aim:

- assess the extent of input data harmonization
- assess the coverage and representativeness of the dataset
- propose recommendations for improvement
- Provide guidance to users of the database

Structure:

- First, *the input side*, detailed account is given on the firm-level data sources utilised and methodologies used.
- Second, on *the output side*, the report examines results obtained when the sector level indicators are eventually produced
- Comparisons are drawn with other micro-information databases such as Multiprod and AMADEUS
- The report so far covers 15 out of the expected 19 countries in the dataset

Strong fundamentals (1)

Data sources & institutes

- On average, countries use 2.5 data sources as input for CompNet
 - To combine information on various topics (trade)
 - To improve data quality (complementing datasets)
- 7 countries utilize data sources based directly upon EU regulation
- In 13 out of 16 countries (in the report) NSIs are included in at least one data source
- Sources can cover the entire firm population (census) or they can cover a part (sample)
 - 28 out of 37 sources draw from census information
 - 9 out of 37 sources draw from sample
 - All data provider sources are linkable to the population

Strong fundamentals (2)

Issues posing no risk for comparability

- In general: good coverage and representativeness across industries and size classes
- All most all countries cover the time period early 2000 to 2014/2015
- All countries cover the entire non-financial sector
- Most countries cover all size classes
 - All countries cover 20+ employees
- Most countries do not make use of imputed data
- All countries can link firms across sources and time
- Some other technical issues: treatment of goods for resale is consistent in all countries, labour subsidies are excluded in labour cost

Recommendations for CompNet

- Value added: to be calculated as turnover minus intermediate inputs
- Differentiation of outlier treatment
- Structural contact with data provider on issues and possible breaks
- Data collection process:
 - Clear definition of input variables and documentation
 - Best practices for new data providers (e.g. currency conversion)
- Guidance to users how to use the data
 - Metadata tool (in development)
- But also need for more discussion (next slides)

Issues for discussion with data providers (1)

Reporting unit: definition of a firm

- Enterprise (unit of economic activity, Eurostat) versus legal units
- 8 countries have enterprise level or higher
- 7 countries use the legal unit

Reporting the unit of observation across countries			
Country	legal unit	enterprise	enterprise group
CZ	x		
DK	x		
EE	x		
FI		x	
FR	x		
HR		x	
HU	x		
IT		x	
LT		x	
NL			x
PL	x		
PT	x		
RO		x	
SE		x	
SK		x	
SL		x	

- This affects:**
 - Observed economic activity
 - CompNet re-weighting procedure
- Recommendations:**
 - Identify the countries for which this is relevant to assess the impact.

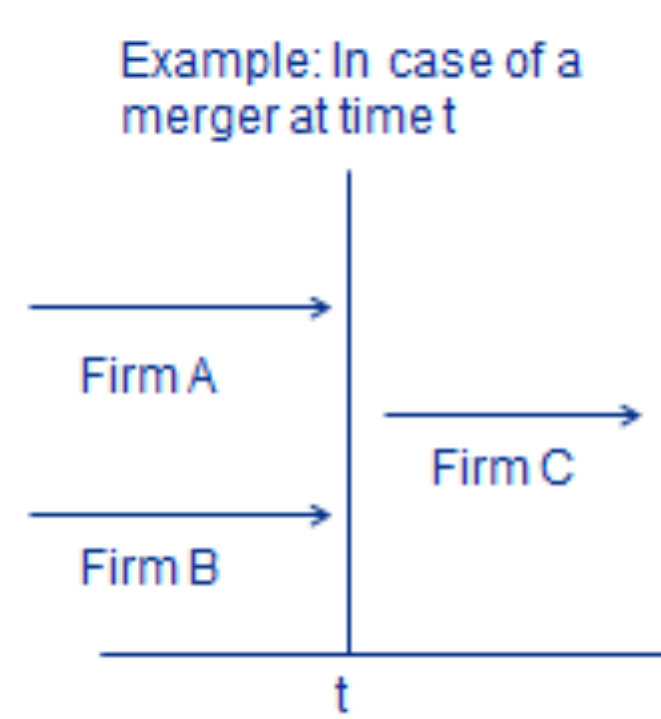
Issues for discussion with data providers (2)

Longitudinal linking

- Countries track firms across sources and across time. But some indicated facing difficulties in following firms through changes to the business structure.

- This affects:**
 - Business dynamics analysis and indicators using lagged values and firm growth figures due to "artificial" entry and exit

- Recommendations:**
 - Identify the countries that face these problems as well and investigate whether they have a supplementary source containing "event information" to classify events related to entry and exit



Issues for discussion with data providers (3)

Measures of employment

- Employment can, and indeed is, reported in different ways
- This affects:**
 - Indicators using employment variable, for example the productivity indicators
 - Size class classification, and therefore CompNet re-weighting procedure
 - Affects levels, but less growth and correlations
- Recommendations:**
 - possibility to align;
 - assess impact for countries that have both; if large difference
 - Introduce a corrective routine

	file	headcount
Persons employed	IT, NL (2)	PL (1)
employees	HR, FI, SK, SE, SL (3)	CZ, ES, FR, HU, LT, PT, RO (7)
	DK (1)	

Issues for discussion with data providers (4)

Valuation of output and intermediate inputs

- The inclusion of taxes and subsidies in the input data differs across countries:

	basic prices	market prices	factor cost	hybrid	unknown
turnover	7	0	6		
value added	0	0	6	5	2
intermediate inputs	4	4		5	

- This affects:** values of input variables and thus values of related output variables. Impact depends on consistency over time of taxes and subsidies.
- Affects levels, but less growth and correlations
- Recommendations:**
 - Quantification of the impact (case studies for countries).
 - Investigate whether subsidies/taxes can be excluded/included.

Issues for discussion with data providers (5)

Labour costs

- The inclusion of taxes in the labour cost variable differs across countries
- This can impose a risk for comparability. Especially since labour taxation can be a big portion of labour costs in EU countries

- This affects:**
 - Analysis using labour cost variables
 - Affects levels, but less growth and correlations

- Recommendations:**
 - Quantification of the impact (case studies)
 - Investigate whether subsidies/taxes can be excluded/included

Table 11. Labour taxes included

Country	yes
Croatia	yes
Czech Rep.	yes
Denmark	no
Finland	no
France	no
Hungary	*
Italy	yes
Lithuania	no
Netherlands	yes
Poland	yes
Portugal	*
Romania	no
Slovakia	yes
Spain	*
Sweden	yes
Slovenia	no

Search information from country
Notes: Check the country column
* for PT, IT and CZ no information available
The principal variables are not included in Croatia, although
information on the level is not completely available