



## Mirror comparison: Foreign affiliates statistics in Finland and in Norway

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## Roadmap

- 1. FATS statistics in brief
- 2. Idea of a mirror
- 3. Nordic project in brief
- 4. Project's main outcome
- 5. Continuation



## Foreign affiliates statistics (FATS)

- EU Regulation on statistics on the structure and activity of foreign affiliates 716/2007
- Use of variables (FATS JWG March 2002):
  - "The aim of FATS is to evaluate the degree of the implementation of the GATS, the functioning of the internal market, the extent of the globalisation of the EU economy and the competitiveness of EU-owned enterprises compared to enterprises owned by the EU's main trading partners."
  - "The most important variables and indicators are those with which information about the presence, importance, unit size, productivity, performance and profitability can be gained. Therefore the data collection of the variables 'number of enterprises', 'turnover' 'value added at factor costs', 'personnel costs' and, 'number of persons employed' has first priority."

## IFATS, OFATS, UCI

#### — IFATS:

"inward statistics on foreign affiliates" shall mean statistics describing the activity of foreign affiliates resident in the compiling country;

#### OFATS:

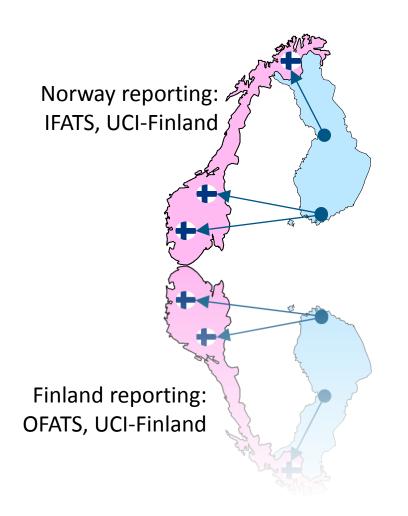
"outward statistics on foreign affiliates" shall mean statistics describing the activity of foreign affiliates abroad controlled by an institutional unit resident in the compiling country;

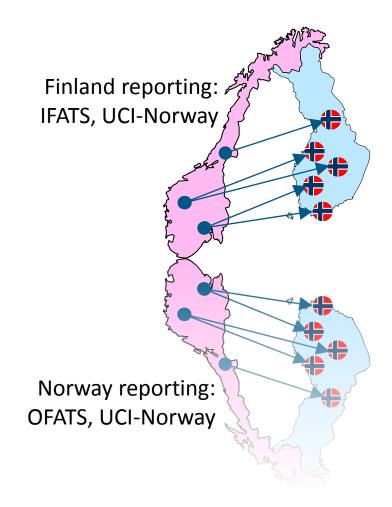
#### - UCI:

"ultimate controlling institutional unit of a foreign affiliate" shall mean the institutional unit, proceeding up a foreign affiliate's chain of control, which is not controlled by another institutional unit;



## **Mirror statistics**





# Eurostat (JWG 2011): Asymmetries in 2007 FATS data

#### Background:

- Asymmetries' analysis in BoP statistics
- Data collected by two compilers on the same phenomenon → discrepancies are 'normal' but should be minimised
- Aim to identify large or systematic bilateral discrepancies
  - → Facilitate bilateral contacts of countries concerned
  - → Identify the reasons for discrepancies
  - → Improve data quality (national and EU)

#### First interpretation:

- 2007 data were not yet of target quality
- In general IFATS > OFATS as expected
- Cyprus had largely underestimated OFATS; residency of many holdings – the real UCI may be unknown to IFATS compiling countries
- Some OFATS variables largely underestimated (consolidation?)

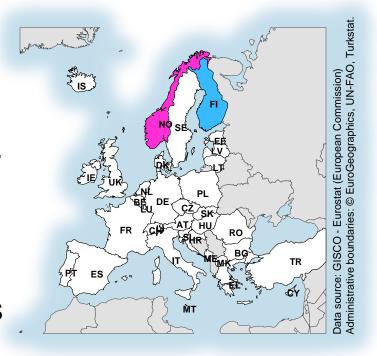


## **ESSnet on Global Value Chains:**

## Improving the quality of FATS by exchange of micro data between Nordic countries

#### Approach:

- The crucial question: Are the frame populations identical?
- Compare foreign OFATS data with domestic data sources: business and group register, IFATS. Link individual records based on the enterprise name.
  - Step I: Simple tables on OFATS and IFATS.
  - Step II: Match between foreign OFATS and domestic business register.
  - Step III: Match between foreign OFATS and domestic IFATS.
  - Step IV: Assess the difference.



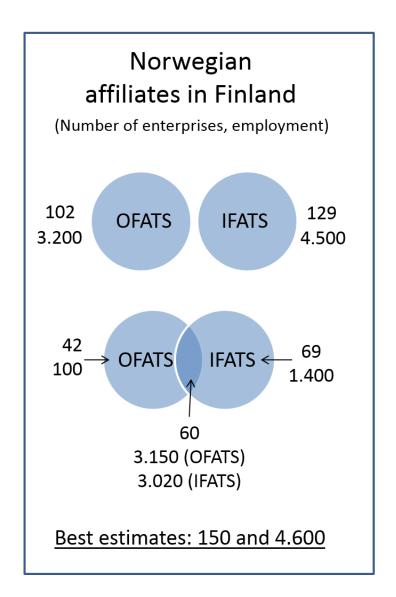
## **Confidentiality issues**

- Confidentiality agreement was written by the coordinating country Norway, signed by all participating countries.
  - Variables to be exchanged.
  - Reception of data, disposal of data after the project.
- Ethical committee at Statistics Finland approved the exchange of micro data.
  - Act on the Openness of Government Activities (621/1999), section 24, paragraph 1, sub-paragraph 21; and <u>EU Regulation</u> 223/2009 on the transmission of data subject to statistical confidentiality
  - Director General made the decision: The 1st time to exchange unit-level data with another ESS authority, non-Finnish recipient.
  - Names of individual statisticians at each institute.
  - Data sets.
  - Validity time.



### **Overall results**

- Norwegian OFATS
   underestimates both ENT and
   EMP compared to Finnish
   IFATS.
- Based on enterprise-level matching, both Norwegian OFATS and Finnish IFATS underestimate the real ENT and EMP.





## Main conclusions

- Determination of the UCI is the biggest problem found in the mirror comparison.
- Both OFATS and IFATS are likely to underestimate population totals, and OFATS more than IFATS.
- Analyses are needed to describe the non-matching enterprises, and the reasons for a non-match, as a tool for suggesting measures for improving the quality.
- The manual checking of enterprises and analysing the results is time consuming.



### Recommendations

- Alternative 1: <u>EuroGroups Register</u> (EGR) to be used coherently as the FATS frame to improve the quality of the statistics.
- Alternative 2: Co-operation with other national statistical institutes to improve FATS statistics.

... but ...

— Both methods have one common challenge: How to commonly agree on the ultimate controlling institute (UCI)?

## **Ongoing projects**

- Eurostat: <u>ESSnet European System of Interoperable Statistical</u>
  Business Registers
  - EuroGroups Register EGR1 => EGR2
  - WP3: International profiling
- Finland: Value added (12 15 0) as a new variable in OFATS:
  - From reference year 2014
  - Value added = Personnel costs + Operating profit + Depreciation and amortisation
  - More information on the type of Financial Statements: IFRS (IASB), US GAAP (FASB), Finnish GAAP = Finnish Accounting Act, ...