



Project Integrated Global Accounts (IGA)

Statistics Netherlands

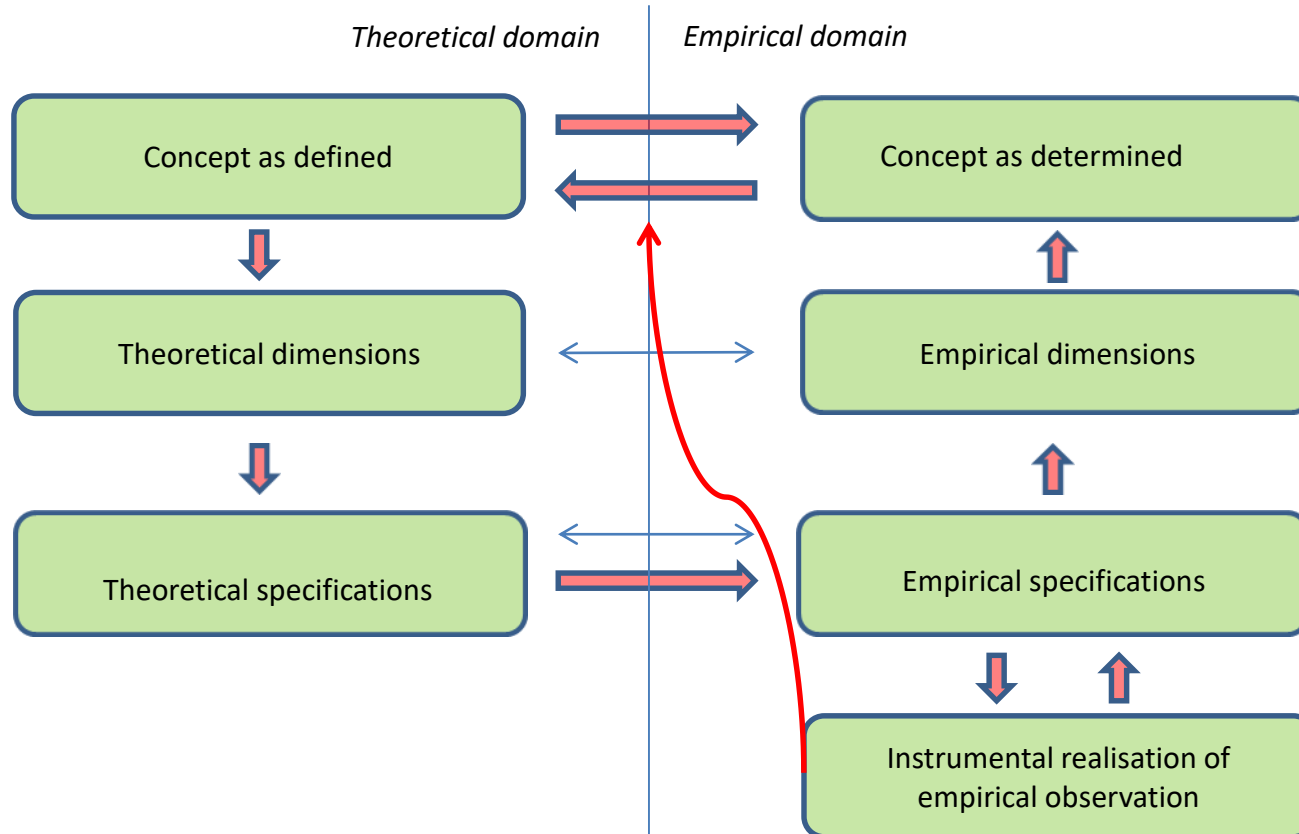
Martin Luppés

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IGA Projects Statistics Netherlands

- Workpackage 2a: identification global production/global producers
- Workpackage 2b: event analysis year of outsourcing
- Workpackage 2c: impact global production transitions
- Workpackage 3a: methodology & set-up LCU
- Workpackage 3b: case studies Business Functions Large Enterprises

Validation pathways



WP2a Identification global producers

- *Where to find GPA information?* > in LCU (?), in ISGVC (?), Nature of Transaction (NoT) codes in ITGS (?)
- *Approach:*
 - Identification of GPA in LCU (operational rules) and feasibility of quantification using Guide GPA (UN/ECE) and Manual GPA (Eurostat)
 - Assessing the added value of ISGVC (question 2.1) and ITGS data (NoT codes)

WP2a Setup

1. Conceptual framework:
 1. *7 GPA concepts (based on Guide & Manual)*
 2. *Self-assessment economic activity ISGVC*
2. Methodology: using *existing* data (basic sources LCU) and *new sources* ISGVC and ITGS (NoT data), *mapping variables* on concepts & *comparing* sources
3. Analytical frame:
 1. *Identifying the concepts: pilot LCU and ITGS NoT data*
 2. *Self-assessment ISGVC with BR and LCU data*
 3. *Basic breakdowns: UCI, TTR, Size, NACE groups*



WP2a Results

1. The self-assessment on economic activity in the ISGVC *> 50% off diagonal and low coverage in LCU*
2. Identification of GPA in LCU (Guide GPA) and ITGS (NoT) *> double numbers in ITGS, hardly any overlap*
3. The coverage of the ISGVC and the LCU population *> approx. 55%*
4. The share of specific NoT transactions in trade *> approx. 3% enterprises involved, and around 1% of export value.*



WP2b Year of outsourcing

1. How does 'the international movement of business functions' relate with (domestic) employment, wages and productivity?
2. Does the year of outsourcing provide valuable additional information?

WP2b Results

- Sourcing enterprises are larger and pay higher wages, but do not show higher employment or wage growth rates.
- 30k jobs are reported to be lost due to moving BF abroad over the course of three years (not significant):
 - *Medians do not differ*
 - *Regression (fixed effects) insignificant*

WP2b Recommendations

- Incorporate questions on current global organisation of production in the ISGVC
- Incorporate questions on retrospective information on sourcing (LCU?)
- Be aware of the enterprise structure: see also the results of WP2A & the post-survey interviews on the evaluation of the ISGVC questionnaire (Vos & Snijkers, 2018)*

* Vos, S. and Snijkers, G. (2018). Evaluation of the International Sourcing Survey 2017 – Visits to enterprises in the Netherlands, Statistics Netherlands.

WP2C Impact of production arrangement

- Analyze the relationship of changes in production arrangements on employment, wages and productivity.
- Due to data limitations a (very restrictive) proxy is used: the change in ownership from foreign to domestic and vice versa.
 - *Change in ownership is based on the UCI*

Research Question

- What is the relationship between changes in the ultimate control (UCI) of a firm and employment, wages and productivity?
- *Regression Analysis (fixed effects)*

$$Y_{it} = \alpha_i + \lambda_t + \beta \text{Change in UCI}_{it} + \varepsilon_{it}$$

WP2c Result

	DOM to FOR	FOR to DOM
Employment (log)	2,10% **	6,90% ***
Wages (log)	1,80% ***	2,10% **
Productivity (growth)	2,20%	-0,60%

TAB 1: Regression results for the relation between employment, wages and productivity on the one hand, and UCI on the other hand. In each regression we control for year dummies. For regressions with a productivity measure as dependent variable we only include business units with at least two consecutive SBS observations. The asterisks ** and * indicate significance at the 1%- and 5%-level.

WP3a Description of the LCU organisation and its methodology

1. Conceptual framework: process flows, organisation & consistency as core concept
2. Methodology: desk research and analysis of inconsistencies
3. Analytical frame:
 1. *ISO 9001 Process documentation*
 2. *Consistency rules*
 3. *Consistency data*

Outline of the report

1. *ISO 9001 process*: four domains of related activities, positioned between source statistics and National Accounts, and mandated for direct contacts with all suppliers and users internally and externally with LCU.
2. *Consistency concept*: based on comparison of 70 different bilateral datapoints per unit (70 consistency rules)
3. *Consistency rules* are using over 400 different variables from 13 source statistics, referring to 15 SNA concepts, creating an annual workload around 25k comparisons (largely by visual inspection) for 5 coordinators.



WP3a Results

- Profiling and data cleaning are basic elements of consistency analysis;
- Consequences of a good reporting structure (profiling) are immediately recognizable in data;
- Comparable variables can be cross-checked very well, even with slightly different definitions and units/periods of measurement;
- Arrangement of one central contact with the reporting unit reduces 'within-variances';
- Small teams make 'knowledge sharing' on reporting units easier;
- Consistency is based on SNA definitions, translated into an automated system of detecting source differences, both cross-sectional and longitudinal (top-down operationalization).

General conclusion

- WP2a: LCU is very successful in reducing SNA adjustments, but is limited in identifying GPA (measurement issues). > *Is it an issue anyway?*
- WP2b: Improve survey strategy ISGVC > *zero-measurement of business organisation?*
- WP2c: Changes in UCI indicates changes in GPA? > *incorporate BR events in modelling GPA ?*
- WP3a: effective LCU requires rethinking the business architecture, investing in people and systems and clear mandates > *cost-effectiveness and data quality guaranteed?*
- WP3b: Business functions <under study>
- Recommendations will be made for
 - *Integrating micro data on GPA using LCU, the ITGS/NoT and the ISGVC data*
 - *Sampling & communication strategies ISGVC for better measurement GPA*
 - *Active profiling of BF and GPA operationalisations in LCU*

Thanks.

