MNE and MDL
Dutch experiences

Martin Luppes
Internationalisation and MDL

- Stylized facts on MNE using MDL
  - What is the Monitor
  - Results Monitor 2015/3 on MNE

- MDL Framework Internationalisation studies
  - Backbone of units
  - Flexible selection of data

- Road ahead
  - Integrative operations
Overview of content throughout the years

2007: idiosyncratic selection of 45 tables based on Statline (in Dutch)

In English
2008: trade and productivity by ownership
2009: R&D, employment and environment by ownership
2010: Trade by enterprise characteristics (ownership & type of trader)
2011: Employment by international orientation (ownership & type of trader)
2012: Business dynamics and international orientation
2013: Internationalisation and regional impact

Over the years more than 65 articles bundled, over 450 different tables, one Linked Employer-Employee Database from 2002 on, serving as pivotal database for different micro data linking (see sheet #14)

From 2014 on Quarterly publication in Dutch

Shares in Dutch economy gives impression of impact and importance
Data used Structural Business Statistic (SBS), International Trade in Goods Statistics (ITGS), Business Register (BR) and Foreign Affiliates Statistics (FATS).

Labels:
- Bar 1: Aantal bedrijven = Number of enterprises
- Bar 2: Importwaarde goederen = Import value goods
- Bar 3: Uitvoerwaarde goederen = Export value goods
- Bar 4: Banen = Jobs
- Bar 5: Omzet = Turnover
- Bar 6: Toegevoegde waarde = Value added
- Bar 7: Personeelskosten = Costs of personnel

- Light green = Domestic enterprises
- Light blue = Foreign controlled MNE’s
- Dark blue = Dutch MNE’s
• Import and export value of goods by MNE’s and domestic enterprises, 2007 and 2014, absolute values in Bln Euros
• Linking BR, FATS, ITGS
• Gives insight in type of export (dutch products and re-exports) and who is active in it

Light green = Domestic enterprises
Light blue = Foreign controlled MNE’s
Dark blue = Dutch MNE’s

Bar 1 & 2: Importvalues 2007 and 2014
Bar 3 & 4: Exportvalue Dutch produce 2007 and 2014
Bar 5 & 6: Exportvalue re-exports 2007 and 2014
• Value of import & export (goods) broken down by product and type of control
• Linking of FATS, ITGS, deepening on profile of product groups

Bar 1 & 2: Foreign controlled MNE, import (bar 1), export (bar 2)
Bar 3 & 4: Dutch controlled MNE, import (bar 1), export (bar 2)
Bar 5 & 6: Domestic firms, import (bar 1), export (bar 2)

Product categories:
• Food, livestock (light blue)
• Fossil fuel (dark blue)
• Chemicals (light green)
• Machinery and means of transport (dark green)
• Other (orange)
Job growth 2008 to 2013, broken down by type of MNE

Jobs 2008 = light blue
Jobs 2013 = dark blue

Bar 1 & 2: Foreign controlled MNE
Bar 3 & 4: Dutch controlled MNE
Bar 5 & 6: Domestic firms
• Growth/losses of jobs, broken down by type of MNE and source of growth
• Linking BR, FATS and SBS
• Foreign controlled MNE positive both due to M/A and net growth due to new enterprises

• Jobs due to autonomous market effects (light blue)
• Jobs due to M&A and splitting up (dark blue)
• Jobs due to birth/death of enterprises (green)
• Dynamics over time (2008 > 2013) in jobs, broken down by type of change
• Effects of changing ownership

Bar 1: domestic > Dutch controlled MNE
Bar 2: domestic > Foreign controlled MNE
Bar 3: Dutch controlled MNE > Foreign controlled MNE
Bar 4: Dutch controlled MNE > domestic
Bar 5: Foreign controlled MNE > domestic
Bar 6: Foreign controlled MNE > Dutch controlled MNE
Jobs by MNE and region

Left hand chart: share of jobs Foreign Controlled MNE by region (NUTS 3 regions)
Right hand chart: share of jobs Dutch MNEs

Ranging light blue (less than 15%) to dark blue (25% and more)
Distribution of employment in Dutch affiliates abroad, by (group of) countries

Light blue : Europe excluding Germany, UK, Spain
Dark blue : Germany
Light green : USA
Purple : Asia
Dark green : United Kingdom
Orange : Spain
Yellow : Africa
Brown : Oceania

Total for Dutch affiliates abroad within Europe (35+20+8+5= 68%)
Outside Europe 32% of which 8% US, 11% Asia
Number of jobs (X 1000) in Dutch affiliates abroad

Categories ranging from 0-5 (light blue) to 100-500 (dark blue)
Results raises the question “is the MNE an elephant” (as we try to compile a complete picture of the structure and impact of it in the business economy). We are the little guys in white coats, enthousiastic and blindfolded.

It would help if an authority would help us on way and gives a clue, but even authorities are not always sure.

When we started to catch the elephant, our position was that the many dimensions of economic globalisation can only be captured by using a backbone of relevant units, and link the required variables from different sources on this backbone as is shown in the next slide. > Example of linking GVC survey with FATS, SBS, ITGS, BR and Job Register.
• Basically, a simple operation (once all key identifiers are in place) which involves selecting the relevant datasets, select the subpopulations under study and extract the required variables for the analysis. It really helps having some proper research questions. Nothing as practical as a good theory, to quote Kurt Lewin in his study on educational practices in 1945.
• Expanding analysis in order to analyse impact on individual income or effects of education the link between BR and Job register is pivotal.
• Not only analysis from the business perspective is possible (as we do in the work on the Monitor) but also from the perspective of the individual including the dynamics of the economic environment in the analysis will probably enrich all kinds of social studies (skills & tasks, job mobility).
Integrative work in 2016

– Trade in goods & trade in service
  - Same breakdowns TEC/STEC for SBS population
  - Matching goods/services on firm level
  - Finding concordance services/goods classification
– Linking data on finances of enterprises with data on production, employment and performance (e.g. Escaith, 2014)

TEC = Trade in Goods by Enterprise Characteristics (Eurostat project)
STEC = Services Trade by Enterprise Characteristics (Eurostat project)
New promises and challenges........ (1)

- ‘Data lake’ and ‘big data’, getting into the deep structure of enterprises (interdependency of all relevant identification keys in administrations and statistics)
- Transaction information on the links between enterprises in value chains
  - Bank data on financial transactions?
  - VIES data (trade)
  - Deepening R&D, CIS and investment data collection

VIES = VAT Information Exchange System
New promises and challenges........ (2)

- Mapping value chains
  - Linking branch information to TEC/STEC, supplemented by expert assessment of chain positions?
  - Policy questions seems to be ‘anecdotic’....
- Profiling large enterprises on
  - Business functions
  - Governance
  - Transactions & relations
Lessons learned in MDL

- Longitudinal analysis and outcomes are complicated:
  - Different periodical samples
  - Changing concepts and definitions
  - Changing processes of collecting and data processing
- Combining registers and samples involves rethinking and combining underlying weighting and correction models (imputations, grossing up)
- And before you start “Nothing as practical as a good theory” (Lewin, 1945)
Elements of future development

- Promote MDL including the methodological issues and the global dimension
- Introduce the notion of the globalised enterprise in the system(s) of globalisation indicators
- Introduce the international classification of Business Functions (and type of governances?)
- Better coverage for services sector (capturing services in the production of goods and services producing enterprises)
- Include the GVC survey in standard data collection(s), e.g. FRIBS in Europe.
Thanks.....we keep practicing.

Contact Martin Luppes (Statistics Netherlands),
Email mlp5@cbs.nl, phone +31615850086