ECONOMIC AND BUSINESS STATISTICS. An academic perspective

ENRIQUE DUSSEL PETERS
Graduate School of Economics
National Autonomous University of Mexico (UNAM)

Coordinator
Center for Chinese-Mexican Studies
School of Economics (UNAM)

http://dusselpeters.com

Expert Group on Business Statistics Meeting
INEGI and UNSD
Mexico City, May 23rd, 2018
TOPICS

- Personnal background as a user of statistics
- Conceptual framework and use (and creation) of statistics
- Conclusions and proposals
I. BACKGROUND (1)

- Graduate School of Economics at UNAM (1993-)
- Consultant for multiple national, LAC and international institutions (public, private and academic)
- Director of the Center of Chinese-Mexican Studies (UNAM) and Director of the Academic Network of LAC on China
- Dozens of thesis, books and analysis of the Mexican (regional and national) economy, specific value-added chains, but also in LAC and China
I. BACKGROUND (2)

- General interest: industrial organization, development theory and territorial development
  In all cases: intensive use of existing statistics (in the respective country, territory, etc.), interviews at the firm level and active relationship with business organizations (international, national, local, ...)

- AND: detailed policy proposals!!!

- dusselpeters.com
II. CONCEPTUAL FRAMEWORK (1)

- Within Graduate School of Economics: multidisciplinary work within UNAM, dozens of Mexican institutions, but also in the US (MIT, Duke, UC-System, ...), Europe (DIE), China (UIBE, CASS, Tsinghua, ...), ...

- METHODOLOGICAL approach: understanding segments of value-added chains in time and space (Gereffi, Piore, Messner, Meyer-Stamer, Dussel Peters, ...): global commodity chains, systemic competitiveness and territorial endogeneity: development as a result of micro, meso, macro and territorial factors
II. CONCEPTUAL FRAMEWORK (2)

- Against (macroeconomic) determinism and *ex ante* understanding of segments of GVC, processes, products and value-added chains
- Processes ≠ products (aeronautics vs. footwear)
- Methodology to understand processes in time and space of products in particular segments of GCC in the short, medium and long-run: territorial endogeneity
- ENORMOUS (!) potential of a micro, meso, macro and territorial dialogue within academics
- ENORMOUS (!) potential of a CONCRETE dialogue and POWERFUL methodology for CONCRETE POLICY PROPOSALS for public and private sectors
## II. CONCEPTUAL FRAMEWORK (3)

<table>
<thead>
<tr>
<th>Methodological resume: analysis, strategies, policies and instruments (including monitoring and evaluation)</th>
<th>SHORT</th>
<th>MEDIUM</th>
<th>LONG</th>
</tr>
</thead>
<tbody>
<tr>
<td>MACRO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(GDP, exchange rate, financing, ...)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MESO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(business institutions, ...)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICRO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(firm level characteristics)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TERRITORIAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(local characteristics, including statistics)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
II. USE OF STATISTICS (1)

- Understanding of limitations: firm-level confidential data + difficulties between establishment and firms, particularly for MNCs, and analysis at:
  - Micro level
  - Meso level
  - Macro level
  - Territorial level

- IN ALL CASES: understanding of global commodity chains (≠ “sectors”)

- EXAMPLES:
  - Trade statistics
  - FDI statistics
  - Analysis based on Input-Output Matrix (OECD/WIOT)
II. USE OF STATISTICS (2)

- Trade statistics: national (Brazil, Central America, China, Mexico, US, ...) and/or international (COMTRADE):
  - HUGE aggregated differences by source (Mexico-China, ...)
  - NO analysis by GVC (≠ “sectors or chapters”): segments and respective items (6-10 digits of the HTS)
  - HUGE differences and relevant for policy proposals
  - Example: yarn-textile-garments, electronics, autoparts-automobiles, pharma-chemical-pharmaceutical, agroindustrial, ....
  - EXTREMELY relevant for territorial endogeneity (in space and time): upgrading, development ... AND POLICY PROPOSALS according to specific territorial specialization
II. USE OF STATISTICS (3)

- **Trade statistics:**
  - For example, YTG, chapters 50-63 vs 5,486 items at the 10-digit level of the HTS (+ dozens of segments within HTS)
  - EXTREME relevance of statistics, yarn \(\neq\) textiles \(\neq\) garments, dialogue + CONCRETE proposals by segment-processes
  - BUT: no/few statistics on international trade by value-chains!
  - “Own” statistics for several GVC for China, MX and US: very relevant!?
### II. USE OF STATISTICS (4)

#### Statistical differences of trade in the YTG GVC (2000-2016)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China: exports to Mx (chapters 50-63) (NBCS)</td>
<td>25</td>
<td>298</td>
<td>1,245</td>
<td>2,564</td>
<td>24,911</td>
</tr>
<tr>
<td>China: exports to Mx (items at 6-digit level of HTS) (NBCS)</td>
<td>29</td>
<td>342</td>
<td>1,604</td>
<td>3,302</td>
<td>30,464</td>
</tr>
<tr>
<td>Mexico: imports from China (chapters 50-63) (SE)</td>
<td>7</td>
<td>129</td>
<td>607</td>
<td>2,716</td>
<td>14,319</td>
</tr>
<tr>
<td>Mexico: imports from China (items at 6-digit level of HTS) (SE)</td>
<td>24</td>
<td>205</td>
<td>969</td>
<td>3,180</td>
<td>20,107</td>
</tr>
<tr>
<td>China: exports to US (chapters 50-63) (NBCS)</td>
<td>3,172</td>
<td>4,557</td>
<td>31,450</td>
<td>42,426</td>
<td>403,047</td>
</tr>
<tr>
<td>China: exports to US (items at 6-digit level of HTS) (NBCS)</td>
<td>3,359</td>
<td>4,517</td>
<td>30,949</td>
<td>51,578</td>
<td>462,006</td>
</tr>
<tr>
<td>US: imports from China (chapters 50-63) (USITC)</td>
<td>3,818</td>
<td>8,450</td>
<td>32,311</td>
<td>44,602</td>
<td>453,827</td>
</tr>
<tr>
<td>US: imports from China (items at 10-digit level of HTS) (USITC)</td>
<td>6,325</td>
<td>9,271</td>
<td>35,304</td>
<td>45,951</td>
<td>486,466</td>
</tr>
</tbody>
</table>

Source: own elaboration based on UN-COMTRADE (2018).
II. USE OF STATISTICS (5)

- **FDI statistics:**
  - Regional, national, regional (ECLAC) and international (UNCTAD) sources: differences of SIGN (+/-), reasons?
    - Registration by first or last destination of FDI: very relevant
    - Include / disaggregate (or not): entities with special goals, realized or announced, ...
  
  - Firm/establishment doing transactions in other countries (original country; Huawei in US investing in Mexico)
    - HUGE statistical differences: Monitor of China´s OFDI in LAC 2018 (with FDI information at the FIRM level), with info on China´s OFDI (2000-2017) and EMPLOYMENT by country, year, M&A/greenfield, by type of ownership (public/private), sector, and BY FIRM
  
  - VERY powerful for dialogue and policy proposals
II. USE OF STATISTICS (6)

**FDI statistics (differences by sources):**

Chinese OFDI in LAC: Share of the public sector (over respective total)

## II. USE OF STATISTICS (7)

**Dussel Peters (2018)**

<table>
<thead>
<tr>
<th><strong>LAC: Main Chinese Firms</strong> that Generated Employment Through OFDI (2000-2017)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>2000-2017</strong></th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>China National Petroleum Corporation (CNPC)</td>
<td>22,841</td>
</tr>
<tr>
<td>State Grid Corporation</td>
<td>19,829</td>
</tr>
<tr>
<td>China Merchants Port Holding (CMPorts)</td>
<td>16,000</td>
</tr>
<tr>
<td>HNA Group Corporation</td>
<td>13,187</td>
</tr>
<tr>
<td>China Communications Construction Company</td>
<td>11,250</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>2016</strong></th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Grid Corporation</td>
<td>19,779</td>
</tr>
<tr>
<td>China Communications Construction Company</td>
<td>6,250</td>
</tr>
<tr>
<td>China Molydbenum</td>
<td>5,000</td>
</tr>
<tr>
<td>Tianqi Lithium Industries</td>
<td>4,250</td>
</tr>
<tr>
<td>Sinosteel</td>
<td>2,084</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>2017</strong></th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>China Merchants Port Holding (CMPorts)</td>
<td>16,000</td>
</tr>
<tr>
<td>China Communications Construction Company</td>
<td>5,000</td>
</tr>
<tr>
<td>JAC Motors</td>
<td>4,400</td>
</tr>
<tr>
<td>Advent International Corporation</td>
<td>4,350</td>
</tr>
<tr>
<td>Yantai Changyu Pioneer Wine</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Source: own elaboration based on Monitor de la OFDI china en ALC 2018.
II. USE OF STATISTICS (8)

- "mixing" data sources: a. WIOT-OECD, b. FDI, c. Infrastructure projects to understand the quantity and quality of employment

+ Macro, meso, micro and national data

Figure 3. Chinese jobs created in LAC = 1.8 million during 1990-2016
III. CONCLUSIONS (1)

- Important improvements in national and international databases: trade, FDI, input-output matrixes (WIOT/OECD), ...

- Several of these efforts allow to “construct” statistics by sector (in Asia or LAC, for example) or by countries (footwear exports by TPP-countries to the US) or a LAC input-output matrix (2000-2014), so far only for Argentina, Brazil, Chile and Mexico (and not for all variables)

- “Old” registration difficulties in differentiating firms and establishments + confidentiality of information; MNCs and increasing transfer of segments of GVC. Effective options for solution and/or case studies?
III. CONCLUSIONS (2)

- Difficulties/”irrelevance” of sectorial statistics of trade and FDI (and others?) vs. GVCs?
- Critical for dialogue between public, private and academic sectors and concrete policy proposals
- Huge -unsatisfied- potential?
III. PROPOSALS

- Proposal 1: define and analyze trade of 5 GVC (at 6-digits of the HTS?)
- Proposal 2: methodological discussion on FDI + elaboration of statistics from several perspectives (host country, origin, transaction/firm-level, …)
- Proposal 3: define and analyze FDI within 5 GVC
- Proposal 4: define and analyze 3 GVC in terms of trade, FDI and WIOT/OCDE in terms of micro, meso, macro and territorial factors and effects
- Proposal 5: seminar/workshop/publication … on a definitive (?) statement regarding the effective statistical potential in registering firms vs. establishments? 3 case-studies (of MNCs)?
ECONOMIC AND BUSINESS STATISTICS. An academic perspective

ENRIQUE DUSSEL PETERS
Graduate School of Economics
National Autonomous University of Mexico (UNAM)

Coordinator
Center for Chinese-Mexican Studies
School of Economics (UNAM)

http://dusselpeters.com

Expert Group on Business Statistics Meeting
INEGI and UNSD
Mexico City, May 23rd, 2018