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Group of Experts on National Accounts
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Closing the gaps between trade theories, trade policies and global production statistics

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The theoretical framework *relevant models*

1. Network economics

- Networks of differentiated agents: who you are connected with is very important
- From graph theory (nodes, vertex, oriented graphs) to Markov or Bayesian chains.
- From graphs to linear algebra: IO matrices
 - Flows indicator (strength and length)
 - IO and National Accounts: Physical, financial and income (factor) circuits

2. Trade Theory: *the new and the “new” new trade theories*

- Importance of specialization and agglomeration effects (territorial dimension)
- Importance of product differentiation and firm heterogeneity (the death of the representative agent)

3. Business School Models: *what is a value chain?*

- Notion of cluster (lead-firms and suppliers; networks and territories, once again)
- Competitive vs. comparative advantages; role of services as enablers/enhancers
- Corporate Social Responsibility: socio-economic dimension at local (micro) level.

4. Development Economics

- Importance of product and functional upgrading (product classification by technological content; strength and length of inter-industrial linkages)
- Importance of social upgrading (trade and employment; tasks and skills; socio-economic dimension at sectoral and macro levels)

What should be counted?

A proper mapping of global trade today :
collecting information on

- **Actors:**
 - Firms and households (both producers and consumers, resident and non-resident)
- **Flows:**
 - goods and services (intermediate, final);
 - factors and income (value-added disaggregation: labour content); FDI (financial flows); non-economic costs (e.g., environment and CO2; water content)
- **Operational and governance aspects:**
 - Trade and transportation costs (e.g., Trade Facilitation)
 - Other transaction costs (e.g., Non Tariff Measures)
 - Corporate ownership and intra-firm trade

How can it be counted ?

1. Mapping the flow of intermediate goods and services

- Revisiting traditional data with a new mind-set
- Potential and Shortcomings:
 - Understanding flows: the role of classifications: BEC (end-use), Rauch (market-power); Lall (technological content)
 - Actors (sectors, firms): remains a black-box, need for additional (sectoral/micro) approaches

2. Supply Use Tables, International Input-Output and Trade in Value-Added

- SUTs as the basic building block (e.g., [OECD Extended SUT Initiative](#))
- International Input-Output Tables and Trade in Value-Added
 - From Academia to Official Statistics (2001-2012)
 - Future extensions (coverage, disaggregation, socio-economic accounts)

3. Trade by Firm Characteristics

- Linking trade and business statistics (EUROSTAT; OECD)
- Extensions to “trade in business functions” (outsourcing/offshoring)
- Complementarity with Input-Output Analysis:
 - Examples of China and Mexico in the new OECD-WTO TiVA database

Conclusions

New challenges for Trade and (inter)National Accounts Statistics in the 21st Century

- **FIRMS ARE BECOMING INCREASINGLY GLOBAL WHILE INTERNATIONAL TRADE HAS AN INCREASING IMPACT A LOCAL LEVEL**
 - From International to Global Statistics
 - From Balance of Payments and Custom Statistics to firm-level and socio-economic data
- **WHAT SHOULD BE COUNTED?**
 - The “trade-investment” nexus: FDI and Ownership
 - Trade and Income Flow: wages, profit, taxes
 - Satellite accounts: socio-economic data, environment accounts
 - The territorial dimension: “Trade and the City”
- **HOW TO MAP AND MEASURE?**
 - New Ways of Milking the Old Trade Statistics Cow
 - Measuring Trade in Value Added
 - Linking Trade and Business Statistics

*Searching for an integrating framework at the UN Statistical Conference
(and elsewhere...)*

Measuring internationalization and globalization

UN-Statistical Conference Friend of the Chair Report, 2015

SCOPE	STATISTICAL DIMENSION	Existing and new aggregate statistics	Existing and new micro data based statistics and analysis (record linkages); confidentiality at NSOs
Existing core statistics and developments	<i>Domestic and cross-border (National Statistical System)</i>	Core national and international accounts, trade and related business statistics — Development and implementation of core international manuals, such as measurement of global production	Micro based estimates of domestic and cross-border processing in manufacturing
Enhancements to core statistics	<i>Domestic and cross-border (National Statistical Systems)</i>	Enhanced country bilateral data confrontation; implementation of modes of supply for trade in services ; Additional details in Supply Use Tables , trade and FDI; satellite accounts (KLEM --employment, capital stock, environment)	Micro based estimates of value added, trade and investment, assets, etc.
Internationalization extensions	<i>Domestic and cross-border (National Statistical System)</i>	Country measures of Trade in Value Added ; Foreign ownership statistics; Outward FATS — employment sales, trade, control, etc.); MNE statistics; Details on mergers and acquisitions	Inward/outward FATS and MNE statistics – Firm heterogeneity (export-intensities, firm size, productivity); international trade-investment-business statistics; Business Functions in- and outsourcing;
Globalization extensions — summation of country activities	<i>Beyond cross-border (International Statistical System)</i>	Trade flows symmetry, Harmonized and Global supply-use tables ; OECD-WTO TiVA ; Aggregate tables built from country micro-data studies ; Globally-consolidated MNEs – activities, financial statements and risk exposures	
Globalization extensions	<i>Beyond cross-border (International Statistical System)</i>	Aggregate global value chains analysis by researchers; Big Data (e-commerce, digital flows,...)	Micro data based global value chains analysis by researchers