



Chapter 12: Bilateral asymmetries, data sharing and global groups register

**United Nations Statistics Division
Seminar on Accounting for Global Value Chains
Luxembourg – June 2017**



Chapter 12

Chapter 12 describes:

Reconciliation and sharing of official GVC statistics

- Consistency of business and trade statistics across countries
- Need for data sharing
- Methodological approaches and recommendations to resolve bilateral asymmetries
- Advantages, ways forward and challenges of building a global register of enterprise groups
- Shared GVC-specific multi-partner extended SUT

Contributors: UNSD, Statistics Denmark, Statistics Netherlands, ISTAT, OECD and Eurostat



Chapter 12: Table of Contents

I. Purpose of Chapter 12

II. Bilateral asymmetries

- A. Bilateral asymmetries in merchandise trade statistics
- B. Bilateral asymmetries in trade in services statistics
- C. Bilateral asymmetries in Foreign Affiliate Statistics
- D. **Focusing on reconciling asymmetries for specific GVCs and main partners**

III. National & Bilateral Data sharing among statistical agencies

- A. Micro-data sharing
 - i. Exchange and sharing of economic data
 - ii. International Collaboration on Microdata Access
- B. **Focusing on specific GVCs and main partners**

IV. Global register for enterprise groups

- A. Building the Global Groups Register
 - i. The Euro Groups Register
 - ii. The Global Groups Register
 - iii. The Global Legal Entity Identifier System (GLEIS)
- B. **Focusing on specific GVCs and main partners**



Reconciliation and sharing official GVC statistics

Especially for nationally important GVCs, you need

- ➡ Consistency of bilateral trade statistics (goods and services) with main partners
- ➡ Consistency of bilateral investment statistics (FDI and FATS) with main partners
- ➡ Coherence and consistency in enterprise group structure and related statistics with main partners
- ➡ Agreement on balancing of shared GVC-specific multi-partner extended SUTs
- ➡ Data sharing arrangements and agreements among main partners in the GVC
- ➡ Shared working environment for frequent updating and reconciling of shared data



Bilateral asymmetries in merchandise trade statistics

- ➡ Valuation: CIF (imports) – FOB (exports)
- ➡ Partner country attribution: Country of Origin ⇔ Country of Consignment
- ➡ Differences in coverage (Trade system and the inclusion or exclusion of certain transactions)
- ➡ Under-valuation on exports (Goods for processing)
- ➡ Differences in goods classification
- ➡ Suppression of details due to confidentiality
- ➡ Time of recording



- a) **Exports valued at FOB** include the value of the goods plus services to deliver goods to the border of the exporting country
- b) **Imports valued at FOB** include the value of the goods plus services to the border of the exporting country's statistical territory
- c) **Imports valued at CIF** include the value of the goods plus insurance services and freight services from the country of export to the country of import

How to reconcile asymmetries caused by Imports CIF versus Exports FOB?

- ➔ **Compile FOB for imports, as recommended by IMTS2010**
- ➔ **Compilation of Imports FOB** can be done (1) via direct reporting of insurance and freight on Customs declarations or (2) via estimation on the basis of surveys of importers or econometric (gravity) models, taking account of kind of goods (e.g. need for refrigeration), distance to partner country, and mode of transport



- “Country of origin” at imports and “country of final destination” at exports are often not symmetrically recorded
- Country of origin is the country where the last “substantial transformation” of the good took place. The importing country knows the country of origin.
- Country of final destination – in practice – is the next country, where goods will be cleared. The exporting country does not know with certainty where the goods will end up.
- The country of final destination may coincide with the country of origin, but with a fragmented production process, this may be rather the exception than the rule.
- This means that the use of “country of origin” at imports leads to bilateral asymmetries in merchandise trade statistics



How to reconcile asymmetries caused by partner country attribution?

- Country of consignment means the next country where goods were (imports) or will be (exports) cleared
- IMTS2010 recommends country of consignment for imports and exports (as additional partner country attribution)
- Country of consignment will reduce by definition the asymmetries caused by partner country attribution



Partner country attribution

Example

2014 - USA exports to Canada vs Canadian imports from USA		total trade	HS 87 source:
		(millions of US\$)	
a	US exports to Canada	312,371	51,422 COMTRADE
	<i>of which:</i>		
b	US re-exports to Canada	49,364	3,325 COMTRADE
c	Canadian imports from US (origin=USA)	251,794	46,886 COMTRADE
	<i>less</i>		
d	Canadian imports from US (origin=USA, direct shipment<>USA)	2,282	23 StatCan
	<i>plus</i>		
e	Canadian import from US (origin<>NAFTA & direct shipment=USA)	42,301	2,447 StatCan
	<i>plus</i>		
f	Canadian import from US (origin=Canada & direct shipment=USA)	2,761	240 StatCan
	<i>plus</i>		
g	Canadian import from US (origin=Mexico & direct shipment=USA)	11,572	1,146 StatCan
	<i>plus</i>		
h	transportation cost from the point of direct shipment	7,305	709 StatCan
	<i>equal</i>	313,451	51,403



- In SNA2008 and BPM6, **Goods sent abroad for processing** are recorded on a strict change of ownership basis (if there is no change in ownership, the goods transactions are excluded)
- Instead, a trade in services transaction is recorded in BPM6 and in the related MSITS 2010
- In IMTS 2010 all transactions of goods for processing are recorded on a gross value ***regardless of change of ownership.***
- Using detailed MSITS and IMTS data in compiling the Supply and Use Tables will lead to double counting in the national SUT and to bilateral asymmetries in the multi-country SUTs



Random asymmetries

- Differences in classification of goods at exports and at imports
- Differences in valuation of goods at exports and at imports
- Suppression of detail of goods transactions at imports or at exports
- Differences in the exclusion of certain types of goods transactions at imports or at exports
- Differences in time of recording of goods at exports and at imports



Bilateral asymmetries in trade in services

- The availability and quality of trade in services data are unsatisfactory, compared to IMTS.
- A variety of different data sources and estimation techniques are used that vary by country and vary by category of service.
- For many countries, complete information by EBOPS category is available for at least one or more (recent) years, but not for the entire period.
- In UN Comtrade, **52 out of 197** countries have reported bilateral Total Trade in Services data since 2000. This represents **47%** of total services worldwide since 2000, because these reporters are the larger economies.
- For these 52 countries, **80%** of the data are specified by EBOPS category. This detailed bilateral data represents **40%** of Total trade in services worldwide since 2000.



Trade in services estimations

- A 'top-down' approach is used:
 - **Develop complete dataset of total trade in services data with partner World;**
 - **Develop complete dataset of all main EBOPS categories with partner World;**
 - **Develop complete dataset of total trade in services by partner country;**
 - **Develop complete dataset of all main EBOPS categories by partner country**
- Missing cells are estimated using back-casting, now-casting and interpolation, starting, top-down, with the three main categories - transport, travel, and other services



Bilateral asymmetry in foreign affiliate statistics

To improve quality of FATS statistics:

- Mirror comparisons between two and more FATS data sets are useful for improving the quality of statistics
- Use the Euro Group Register (EGR)
- Co-operate bi-laterally with another statistical institute to provide feedback on how to improve the statistics

Major obstacle:

- Determining (and agreeing on) the residency of the ultimate controlling institutional unit (UCI)



Data sharing among statistical agencies

Main benefits:

- lower response burden
- lower non-response rate
- improved efficiency
- better precision

Main challenges:

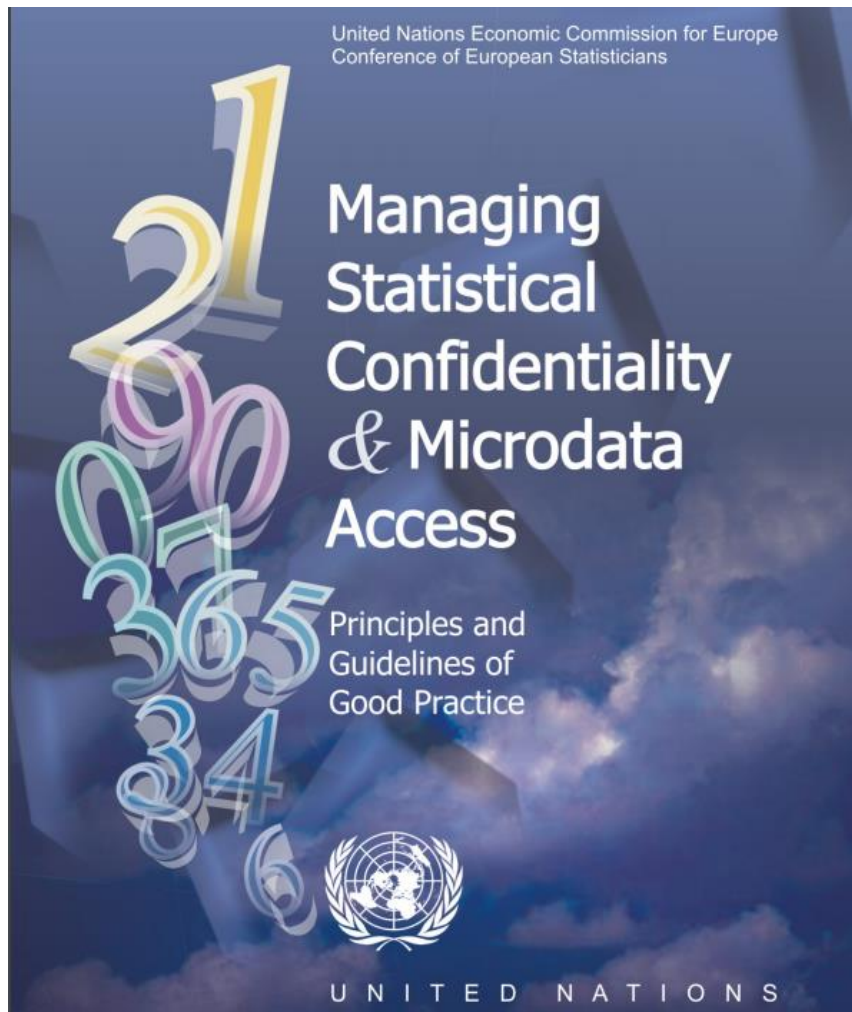
- legal and confidentiality constraints
- dependency on external data providers
- timeliness
- differences in concepts and classifications
- quality issues of external data
- maintaining trust
- technical capacity
- willingness to exchange data

Strategies:

- bilateral agreements
- communication with respondents
- following best practices
- back-up systems/strategies for breaks in external data flow
- new editing and now casting methods
- co-operating with partners
- developing coordination mechanisms
- exchanging information & experience
- developing guidelines or technological tools



Data sharing: International initiatives



OECD EXPERT GROUP FOR INTERNATIONAL COLLABORATION ON MICRODATA ACCESS

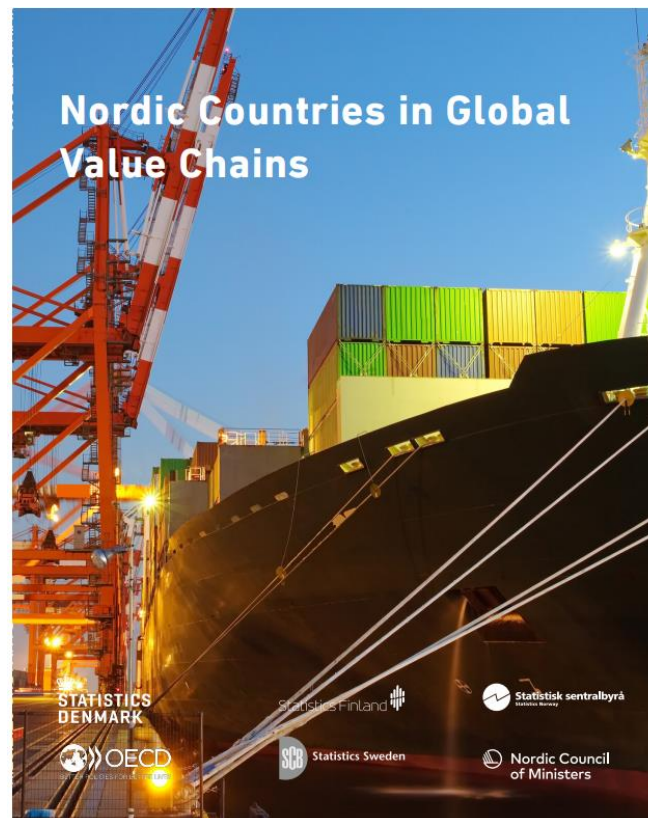
FINAL REPORT





Data sharing: Country and regional examples

Networking Exercises: The FDI Network



Nordic Countries in Global Value Chains

Improving the quality of Foreign Affiliates Statistics (FATS) by exchange of micro data between Nordic countries



U.S. – Canada Data Exchange



G-20 DATA GAPS INITIATIVE



eurostat

Intra-EU trade - exchange of micro-data



Eurogroups Register

UNIT	Characteristics	Figures for the 2015 frame
Legal units (all units which were identified)	identification & demographic characteristics	about 23 million (<i>about 0.5 million outside Europe</i>) – potentially part of groups
Legal units (which are part of a multi-national groups)	identification & demographic characteristics, control and ownership characteristics, activity code (NACE), number of persons employed	about 780 thousand in multinational groups
Enterprises (which are part of a multi-national groups)	identification & demographic characteristics, activity code (NACE), number of persons employed, turnover, institutional sector	about 640 thousand in multinational groups
Enterprise groups	identification & demographic characteristics, structure of the group, group head, country of global decision centre, activity code (NACE), consolidated employment and turnover of the group	about 80 thousand



UNSC (**Decision 46/107 in 2015**) officially requested to

- 1. prepare a "Handbook on the measurement of international trade and economic globalization statistics"*
- 2. create a global register of multinational enterprise groups*

Handbook Context = growth in globalization and resulting need for an extended set of business statistics and economic accounts

Handbook Focus = Measurement and analysis of regional and global value chains



- **Confidentiality will be the main issue**
 - NSIs are reluctant to share confidential micro-data
- GGR → no legal framework as EGR, but can build on:
 - *the EGR platform*
 - *the experience in using commercial data*
 - *the LEI developments*
 - *the UN capacity to recommend better sharing of information*



GGR Potential Data Sources

- ❑ **The Global Legal Entity Identifier System (GLEIS)**, mandated by the G-20 to assign a reference code that uniquely identifies legally distinct entities engaged in financial transactions

- ❑ **Commercial Data Providers**

- ❑ **ADMINISTRATIVE SOURCES**

- EDGAR (USA) - submissions by companies required by law to file forms with the U.S. Securities and Exchange Commission (SEC)
- European Business Register, a network of administrative business registers kept by registration authorities in most EU countries

PROS

- Unique identification of entities
- Available free of charge

- Good coverage
- Short-term data availability

- High quality, regular and timely, validated
- Standardized
- Available online

CONS

- Limited coverage, especially outside of the financial sector

- No unique identification of entities
- High cost
- NSIs unlikely to validate

- Use of EDGAR may require specialists/is labor intensive



Update on GLEIF

- **In May 2017** GLEIF began collecting 'Level 2' data to answer '**who owns whom**'
- **If the direct and / or ultimate parent of an LEI registrant has obtained an LEI, the child legal entity will be obliged to provide LEI of its direct and ultimate parent**

Data elements of Level 2 information:

- Identify the legal entities involved
- Specify the type and other characteristics (e.g. dates) of the relationship
- Relationship validation and reporting information collected by the LEI issuing organization





1st phase

- Tests on different possible sources to prove the feasibility
- Tests on global profiling
- Reflection on the GGR content and on flows with EGR

2018: Report to the UNSC



Purpose of Chapter 12: Recap

Reconciliation and sharing official GVC statistics, especially for *nationally important GVCs*

Meaning for the interactions with the most important economic partners in some specific GVCs

- ▶ Consistency of bilateral investment statistics (FDI and FATS) with main partners
- ▶ Coherence and consistency in enterprise group structure and related statistics with main partners
- ▶ Agreement on balancing of shared GVC-specific multi-partner extended SUTs
- ▶ Data sharing arrangements and agreements among main partners in the GVC
- ▶ Shared working environment for frequent updating and reconciling of shared data



Thank you

United Nations Statistics Division
Seminar on Accounting for Global Value Chains
Luxembourg – June 2017