

Possible extensions of SNA data collection for better TiVA statistics



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Agenda

- Globalisation and global value chains
- Trade in value added (TiVA)
- Compatibility with SNA
- Data availability
- Data requirements

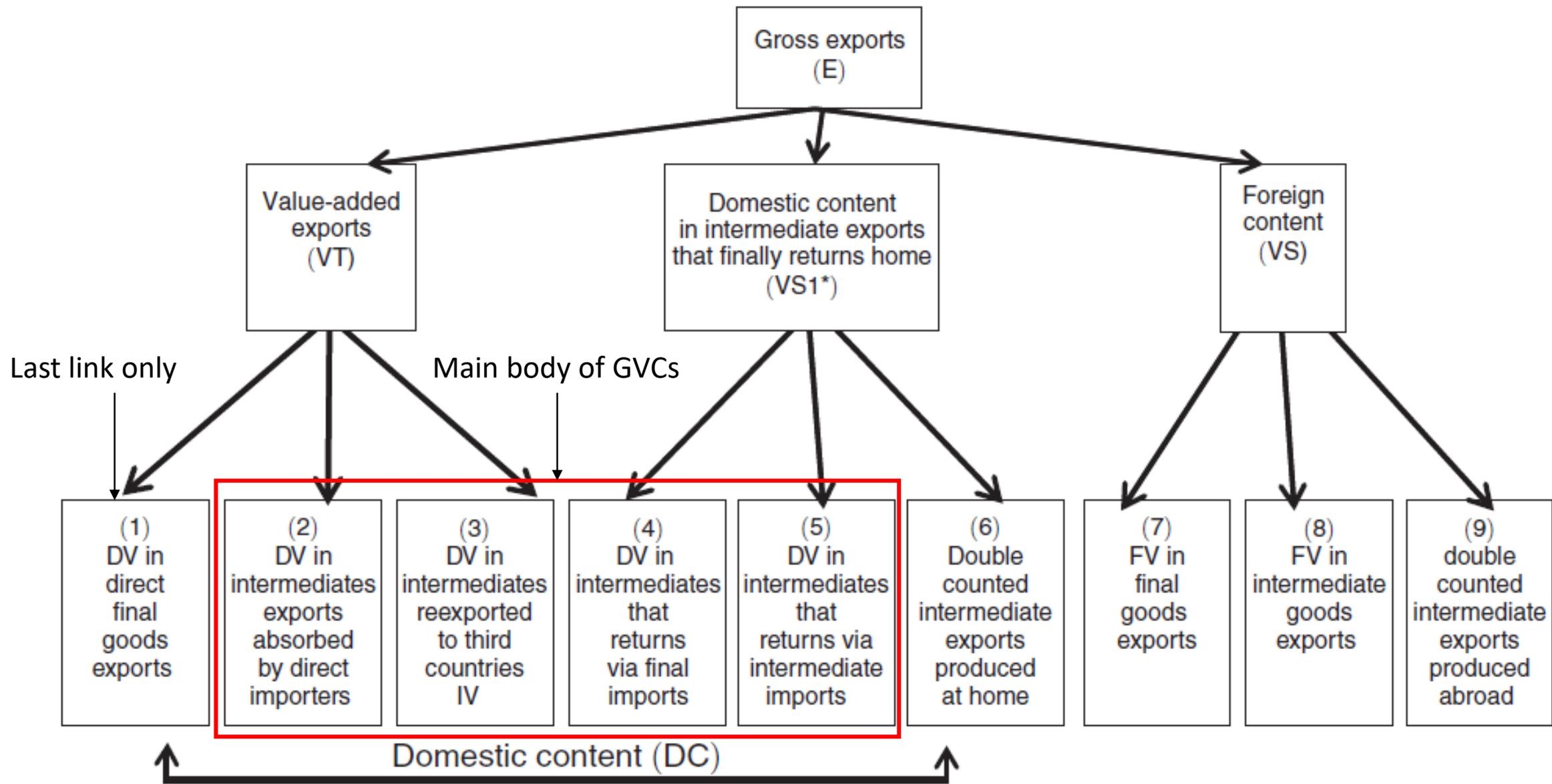
This presentation is an overview and is not based solely on own research.

Global Value Chains (GVC) and globalisation

- In the past decades the nature of international trade changed.
- New forms of trade occurred.
- New forms of production formed.
- Outsourcing, offshoring, networks and chains.
- Global Value Chains:
 - Popular research topic (case studies, complex models) 😊
 - In the focus of economic policy (new wave of competitiveness) 😞
 - In the centre of official statistics 😐
 - No definition, no data

GVC definition

- Many definitions.
- My favourite:
„... a system of value added sources and destinations within a globally integrated production network.” (Koopman et al., 2011)
- Maybe a bit broad. Why?
- No words about class of products, nor type of trade.
- Eg.: Can e-commerce be a part of GVC? Merchanting? Quasi-merchanting?
- Why is it so confusing? Because there is no reliable data and what we have is biased and misleading.



What data do we have on GVCs?

What we all no know (and possibly hate to repeat it):

- Gross trade statistics is biased as it double counts the price of intermediate inputs in exports.
- Trade in value added (TiVA) data is a promising experiment to map GVCs globally. But it's just an experiment with serious shortcomings:
 - Aggregated and estimated (and not official)
 - Inconsistency among national IO tables
 - Companies are assumed to be homogenous throughout the economy
- OECD, WIOD, GTAP, FIDELIO – inconsistent results

Main problems with TiVA

TiVA calculations are very complex and correct in itself. The sources of problems are the IO tables and international trade statistics.

- Inconsistency in bilateral trade statistics
 - Beside problems regarding data collection we know nothing about the product type changes (changes in SITC codes)
- Two very strong (and possibly false) assumptions:
 - Constant technological coefficients in the economy
 - Same consumption of intermediate goods in case of export goods and final goods for domestic consumption
- High aggregations
- Discrepancy to case studies

Globalisation

- GVCs are just one aspect of recent globalisation trends.
- There are "new" forms of trade
 - Some services (former non-tradeable sector)
 - E-commerce
 - Merchanting
 - Quasi-transit trade
- There are "new" types of companies
 - Special purpose entities
 - Transnational companies (who possess value added?)

Information wanted

To map globalisation and GVCs:

- Physical transformation of intermediate products (deeper BEC codes)
- Geographical aspects (both X and I) at industry level
- Ownership
- Function in production
- Other (labour, migration etc.)

Globalisation and SNA

Global phenomenon	National accounts items most affected
Arrangements within MNEs, including transfer pricing	Allocation of Gross value added (GVA)/GDP across countries; international trade in goods and services; investment income and financial flows
FDI relationships	Investment income and financial flows; i.i.p.
Special purpose entities (SPEs)	GDP in relation to GNI, International trade in services; investment income and financial flows; i.i.p.
Goods sent abroad for processing	GVA/GDP; international trade in goods and services
Merchanting	International trade in goods (and possibly services)
IPPs	GVA/GDP; capital formation; international trade in assets and related services
Quasi-transit trade	GVA/GDP; international trade in goods
International labour movement and remittances	GDP; GNI; gross national disposable income; international transfers
Ownership of property abroad	International trade in services; investment income and financial flows; i.i.p.
Internet trading	International trade in goods and services; household consumption
Limitations of national data collections	Imports, import prices, GDP/GVA, and Productivity

Source:
UNECE

New SNA dimensions needed

- Supply and use tables: X, I, GCF, C by country of origin
- Production account: intermediate inputs and value added by country of origin
- Income account: profits by country of origin

Today there is no existing best practice. SNA data collection is burdensome for companies and NSIs as well.

Hungarian example of SNA data collection

- Corresponds with Eurostat standards.
- Foreign trade (intra+extra EU) data is collected separately and independently from production data: volume, price, partner, type of shipment. No questions about the use of export/import products.
- Production: product type, volume, type of production (own production, outsourcing), revenue from sales (inventory, export, domestic), taxes
 - Additional entries: production abroad – just revenue from sales
 - No information about partner country, type of the product etc.

Hungarian example of SNA data collection

- Income statements: revenue from sales, cost of goods sold – regardless the source of inputs and the final destination of the products (no import and no export).
- Officially, foreign trade statistics is not synchronised with production statistics.
- If it was synchronised, there would not be enough information.

Conclusion

- Globalisation is much more than global value chains
- New phenomena occurred in production and trade
- Currently available data do not cover globalisation
- TiVA estimations are good start but modification of SNA data collection is needed
- Most important aspects of new dimensions: country of origin and change of product nature
- Can it be done? We are not sure. 😞

Thank you for your
attention!

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