



EXPERT GROUP ON EXTENDED SUPPLY-USE TABLES: RESULTS

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Background

- CSSSP (OECD Committee of Statistics and Statistical Policy) formed Expert Group on ESUTs in 2014
 - *to develop improved responses to (quality and policy) demands for additional and integrated insights on globalisation (trade and investment) and its consequences for value added, productivity, employment, and the natural environment.*

Meetings

- Aguascalientes, Mexico (October 2014)
- Paris, France (October 2015)
- Paris, France (March 2017)



EGESUT Mandate

- Develop the architecture of Extended Supply-Use Tables;
- Document the practical and innovative methods that can be used to construct such tables;
- Provide recommendations regarding best practices that:
 - Minimise heterogeneity, within given confidentiality constraints;
 - Shed light on beyond value-added dimensions;
 - Without imposing significant processing and compilation burdens on statistical institutes;
 - And with minimal impact on data collection, i.e. capitalizing on existing data sources and expertise such as TEC, FATS and SBS



Architecture of Extended SUTs: three dimensions

- **Industries broken down by firm characteristics**, for example:
 - Ownership (foreign/ domestic), firm size (SMEs/large); trading status (exporter/non-exporter); activities (processing/non-processing); informality (formal/informal);...
- **More detailed breakdowns of value added and supplementary rows on ‘Beyond GDP’ dimensions**, for example:
 - Property income flows (→ trade-investment nexus and ‘stickiness’ of FDI);
 - Emissions, material flow matrices (→ environmental impact of GVCs, footprint indicators);
 - Employment, jobs, wages and business functions (→ inclusive globalisation);
 - Taxes on income, wealth (→ BEPS);
 - Capital flow matrices (→ improved productivity estimates)
- **Additional final demand breakdowns**, for example:
 - Separately identified re-exports;
 - Non-resident expenditures by product;
 - Gross flows related to global production arrangements



Much has already been accomplished...

	Industry dimension	Additional dimensions
Austria	MNE and Exporter	
Belgium	SME	Environment
Canada	MNE SME Exporter	SEEA Emissions (11 pollutants)
Chile	MNE SME Exporter	
Denmark	MNE SME Exporter	
France	Not yet finalized	
Japan	Exporter	
Korea	Exporter	Employee compensation
Mexico	Global Manufacturers; Formal/informal	
Netherlands	SME MNE	
UK	Exporter	
USA	MNE	
Costa Rica	Export processing firms	
Lithuania	Not yet finalized	
China (NBS)	Not yet finalized	
RIETI Japan	Exporter	
CAS China	MNE Processing firms	CO2 emissions

- Costa Rica, Netherlands published results; 4 others plan dissemination
- 3 countries intend to produce ESUTs as part of their future regular work program



...although many challenges remain...

- Absence of information on **product dimension** (purchases of intermediate inputs, by firm type)
- Integrating data sources with different **statistical units**
- Ensuring **representativeness** when integrating data sources with different sample size and grossing up factors
- Ideally, ESUTs should be developed **in tandem with SUTs** (or replacing SUTs)
- But when breaking down existing SUTs ex post:
 - Treatment of **trade through wholesalers**
 - **Level of detail** when using proportionality assumptions (> EGESUT proposes ~200 products)
 - Mimicking adjustments by SUT compilers in the microdata (e.g. in classifications)
- Nature of the **statistical system** and institutional arrangements (e.g. centralized systems, and systems that rely on administrative data, may have advantages)
- **Communication and dissemination** (possible policy messages, but also: confidentiality concerns)
- ...



...and work is planned to continue

- EGESUT is currently finalizing the **report** on its activities to CSSP, recommending (amongst others) to continue this work, given that
 - several countries plan to permanently produce these tables
 - several additional countries plan to start this work
 - compilation challenges remain
 - additional priorities (in addition to integrating firm heterogeneity) were identified:
 - the integration of foreign investment (flows)
 - the integration of employment and employment-related variables (e.g. wages)
 - capital flow matrices for productivity analysis
 - (for example, Chinese exports of goods produced with German machinery will in the current TiVA approach not embody any German value added)



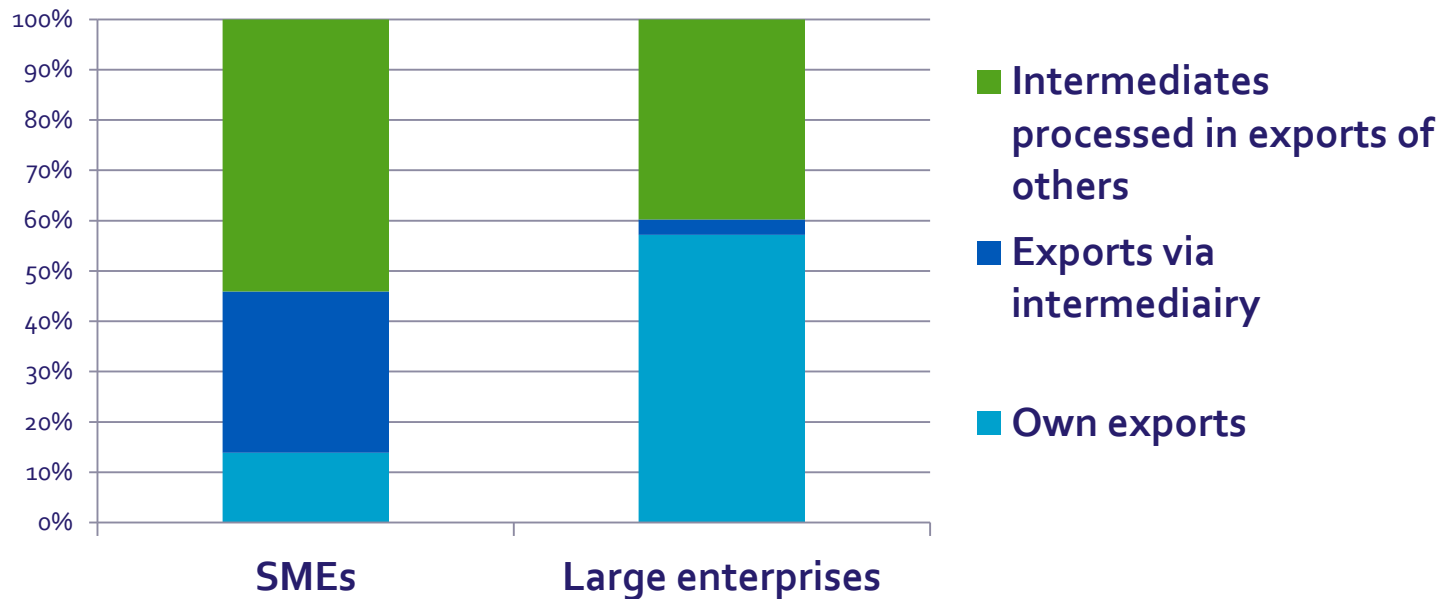
RESULTS



SMEs and GVCs?

Netherlands investigations show that SMEs rely much more heavily on exporting via intermediaries...

Share of VA due to exports of Dutch produced goods by export channel





MNEs and GVCs

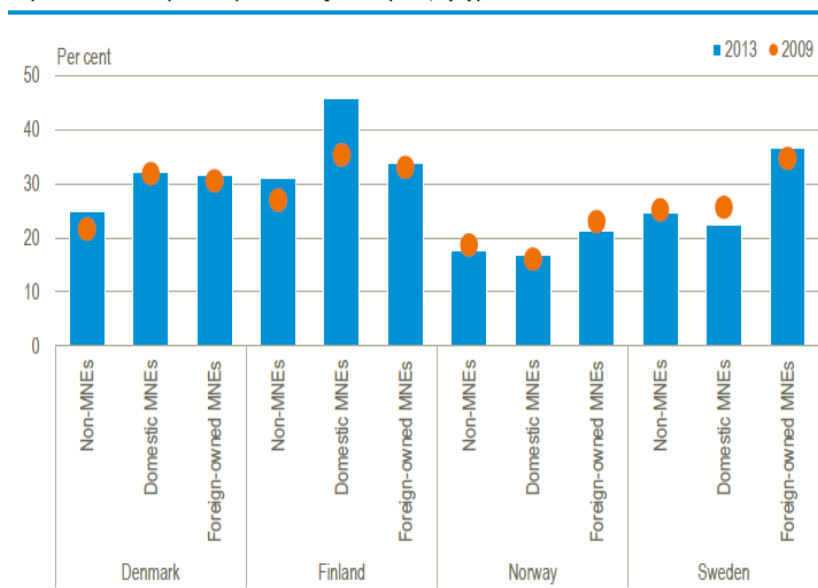
VA/Output by Ownership of firms (%)

Chile

Industry	MNE		Non-MNE		Total VA/Output
	VA/Output	Market share	VA/Output	Market share	
Agriculture, Forestry and Fishing	6,6	8,6	31,8	91,4	29,6
Mining	44,4	79,4	36,4	20,6	42,7
Manufacturing Industry	6,5	50,8	31,7	49,2	18,9
Electricity, gas, water and waste management	32,1	75,0	37,5	25,0	33,4
Construction	36,4	4,5	33,5	95,5	33,6
Wholesale and retail trade; restaurants & hotels	19,4	35,0	21,6	65,0	20,8
Transport, information and communications	36,2	49,6	43,0	50,4	39,7
Financial services	18,3	28,0	23,7	72,0	22,2
Business Services	49,4	17,1	54,5	82,9	53,6
Dwelling services and real estate	68,6	3,9	54,0	96,1	54,6
Personal services	72,2	7,9	62,1	92,1	62,9
Total	24,1	37,2	31,6	62,8	28,8

Nordic countries

Import content of exports as per cent of gross exports, by type of firm



Canada

Foreign MNEs' share of gross exports and value added exports

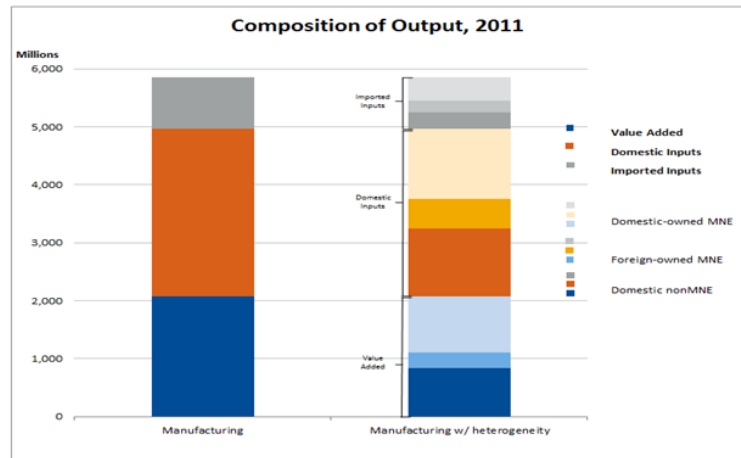




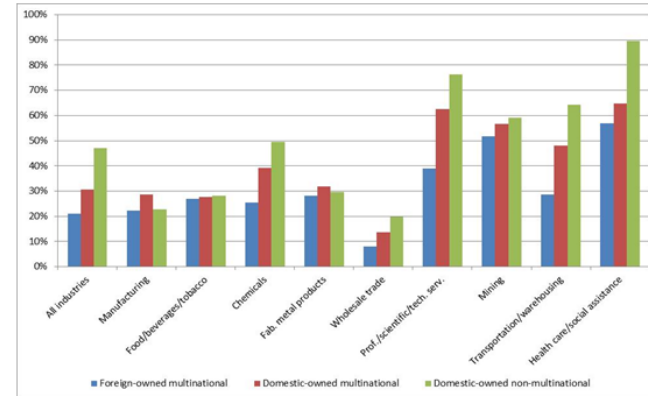
MNEs and heterogeneity

United States highlighted MNEs' higher import content of output and lower direct and indirect domestic content of exports

Manufacturing with and without heterogeneity

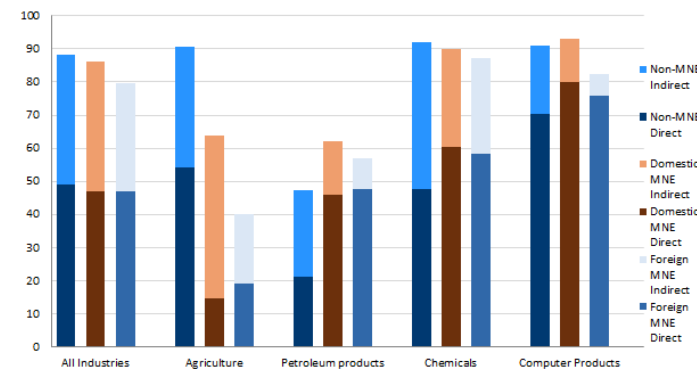


Firm-level heterogeneity: Value added as a share of output, selected industries 2011



Source: James J. Fetzer and Erich H. Strassner, "Identifying Heterogeneity in the Production Components of Globally Engaged Business Enterprises in the United States," BEA working paper (WP2015-12).

Direct and indirect domestic value added share of gross exports with firm heterogeneity, 2011



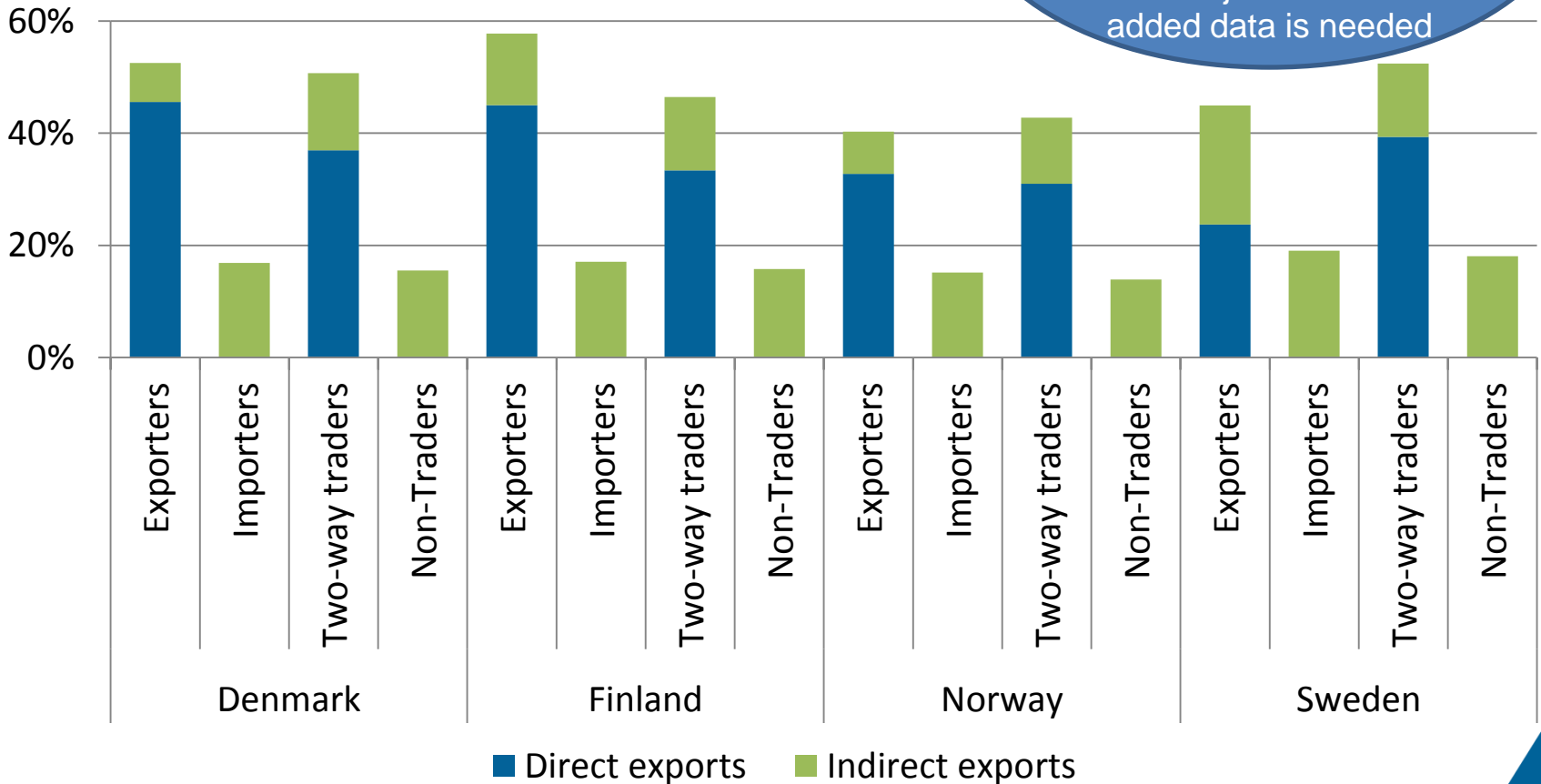
Fetzer, Howells III, Jones, Strassner, Wang (2016) "Estimating Extended Supply-Use Tables in Basic Prices with Firm Heterogeneity for the United States: A Proof of Concept"



ESUTS for Jobs...

Nordic countries report up to 20% of employment at non-trading enterprises sustained by foreign final demand

Share of employment that is embodied in exports, by firm type, 2013



Challenges exist in measuring relative productivity between different types of firms - greater coherence between jobs and value-added data is needed



THANK YOU