

# ***Economic Globalisation and Global Value Chains – Measurement issues***

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# Today's presentation

- Drivers of economic globalisation
- Related measurement issues
- ESSnet on Measuring Global Value Chains
- Summing up: Main issues to be addressed

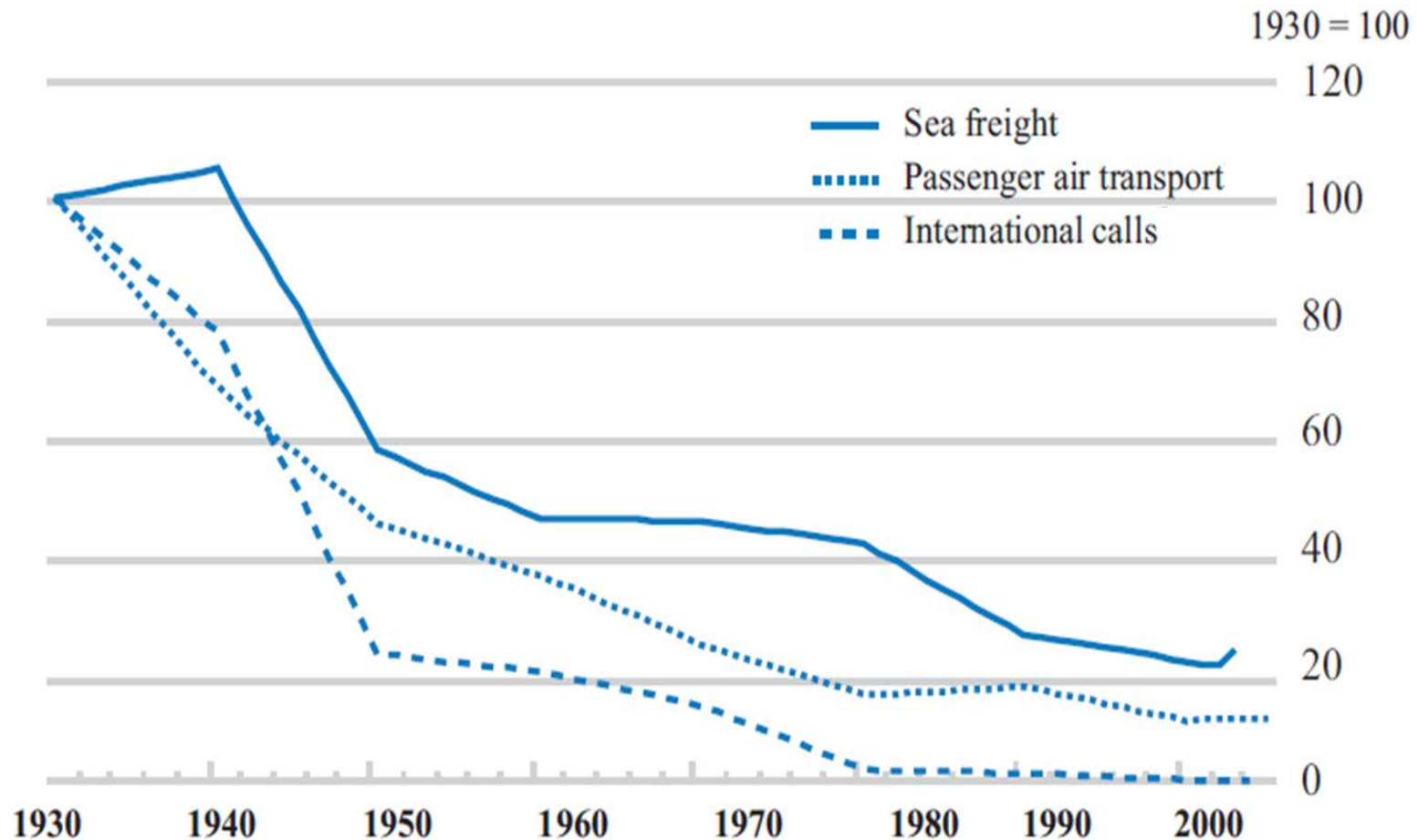


# Drivers of globalisation

- Increased liberalisation of international trade and movement of capital (and individuals)
- Technological development lowering costs of transportation, travel and communication
- Increased modularisation of the production process – both for manufacturing and services, as market transactions substitute for hierarchical organisation – enabled by technology and regulatory reform
- New ways of organising the production processes
- Importance of emerging new markets



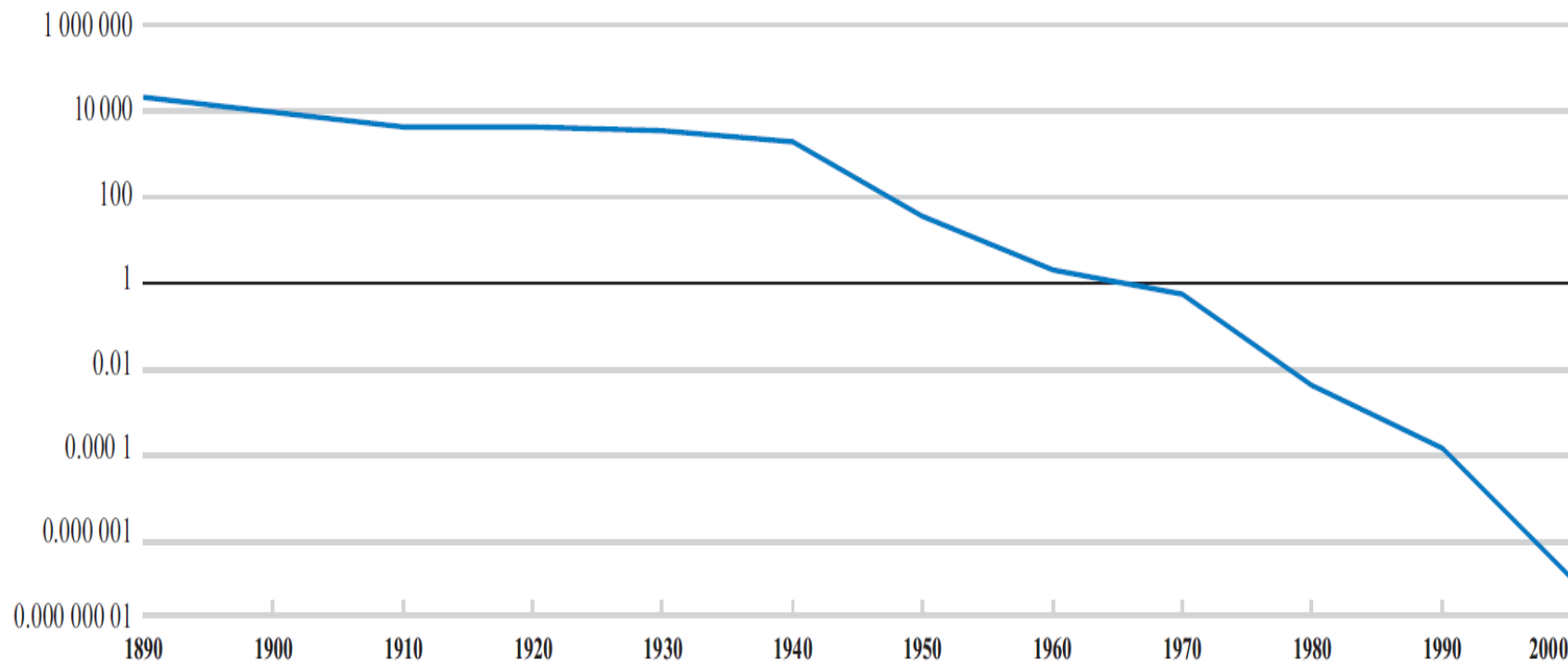
# Drop in real transport, communication costs



OECD, *Economic Outlook*, 2007/1, No. 81

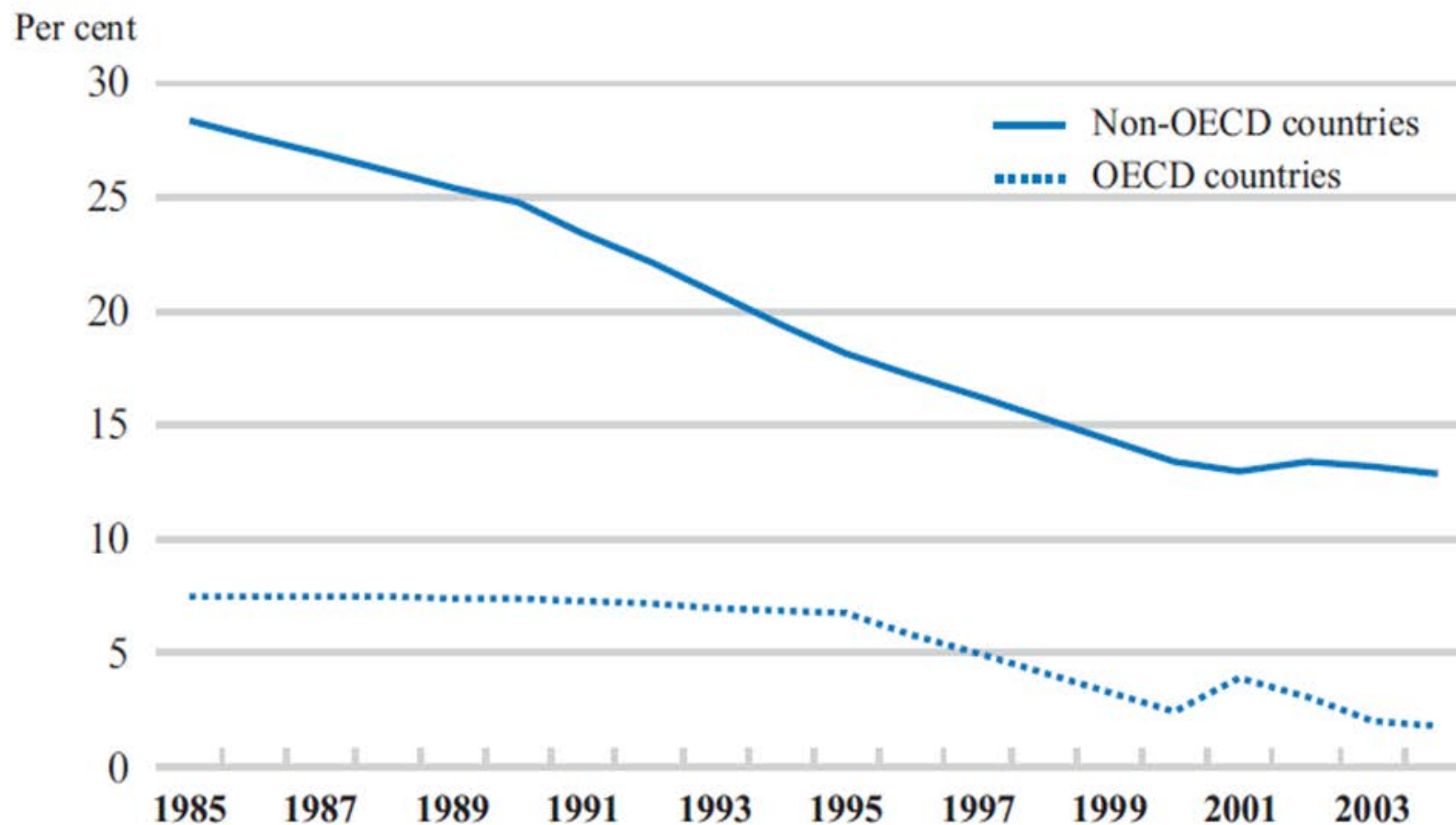
# Plummeting costs of information processing

2005 US\$ per million operations (log scale)



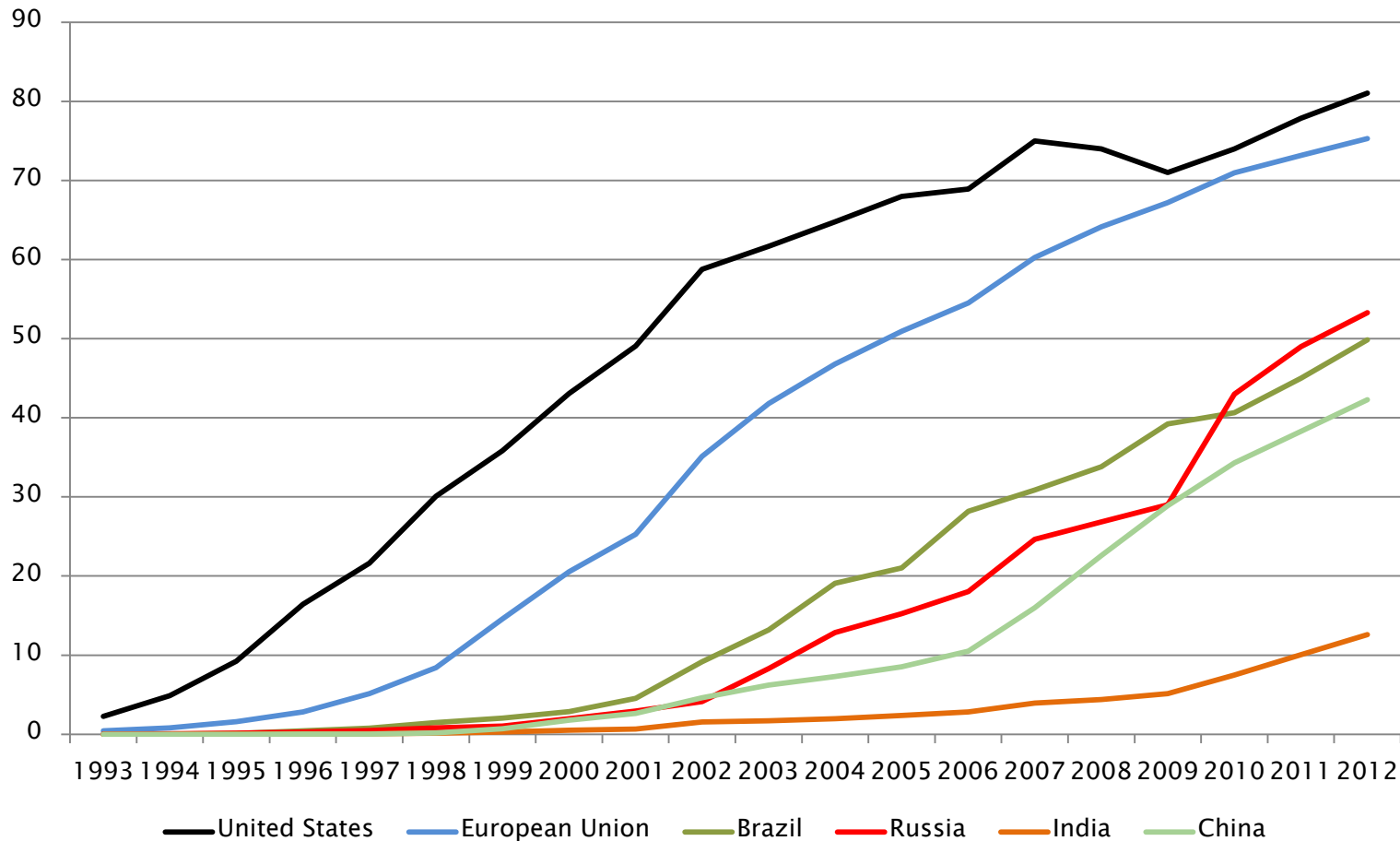
OECD, *Economic Outlook*, 2007/1, No. 81

# Lowering of tariffs



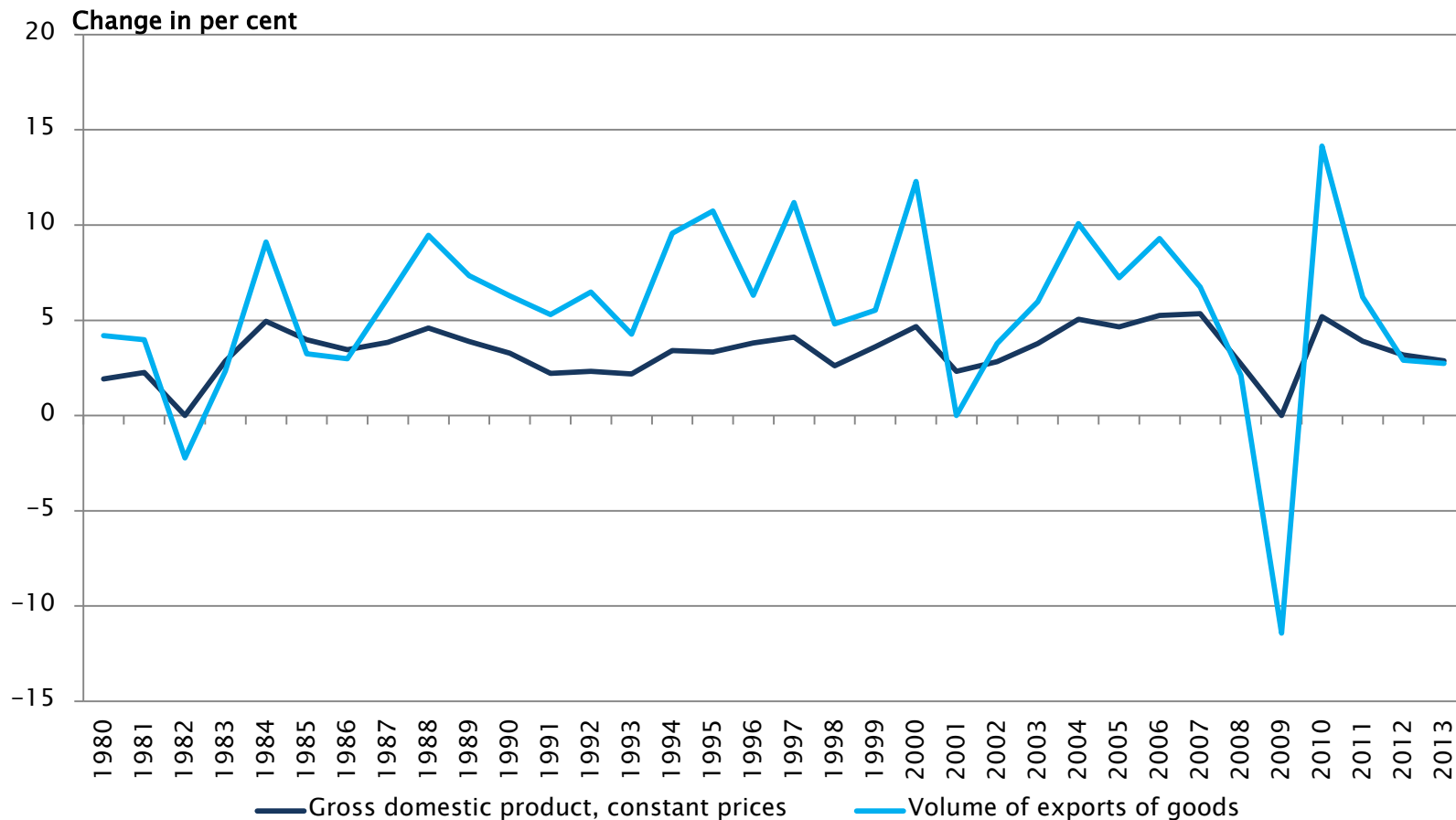
OECD, *Economic Outlook*, 2007/1, No. 81

# Explosion in internet access: Internet users per 100 inhabitants



World Bank, *World Development Indicators*

# World trade elasticity : annual change in world GDP and goods export



IMF, *World Economic Outlook Database*, October 2013





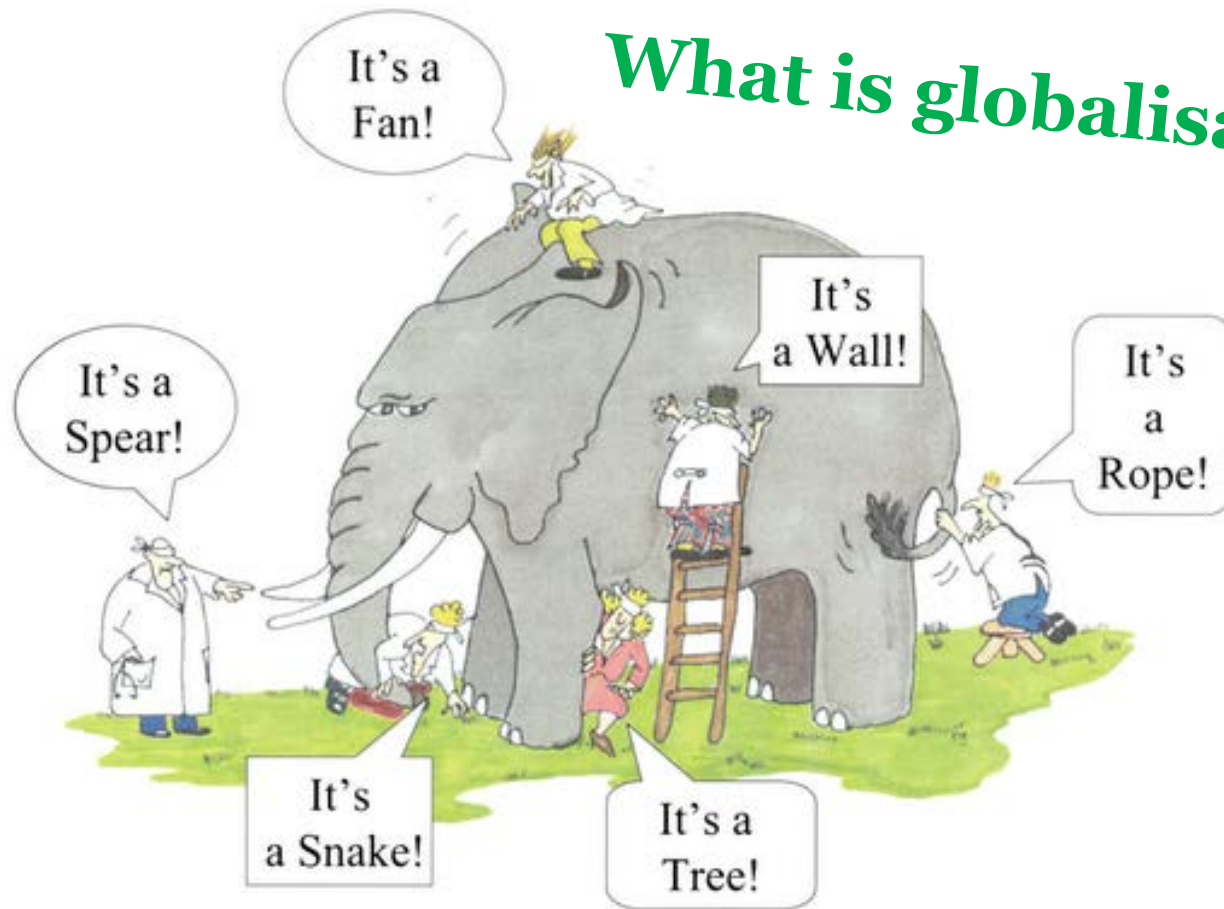
# Challenges in measuring globalisation

- Official statistical production systems mainly designed to measure domestic activities
- The dynamics of globalisation requires introduction of new concepts, e.g.
  - Business functions
  - Enterprise groups
- Changed environment with focus on diminishing respondent burden on enterprises



# Why different statistical domains and stakeholders need to co-operate

*What is globalisation?*



# ***ESSnet Measuring Global Value Chains***

Four work packages:

1. Globalisation indicators
2. International Organisation and Sourcing of Business Functions survey
3. Micro Data Linking project
4. Linking of foreign affiliates (FATS) statistics with Business Registers



# Work Package 1: Globalisation indicator themes

International  
trade

International  
investments

International  
sourcing and  
organisation

R&D and  
technology

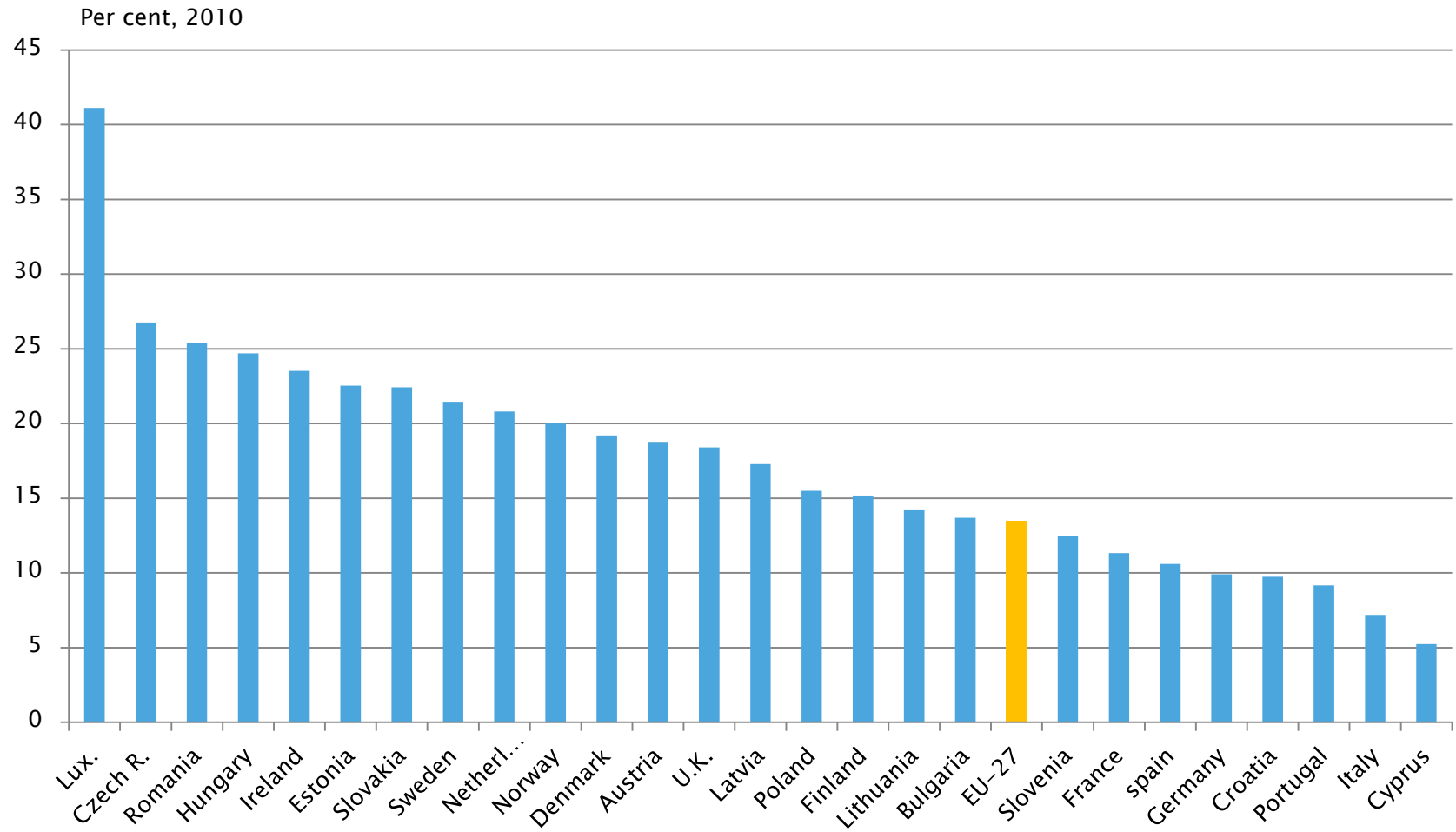
Employment

Business  
dynamics

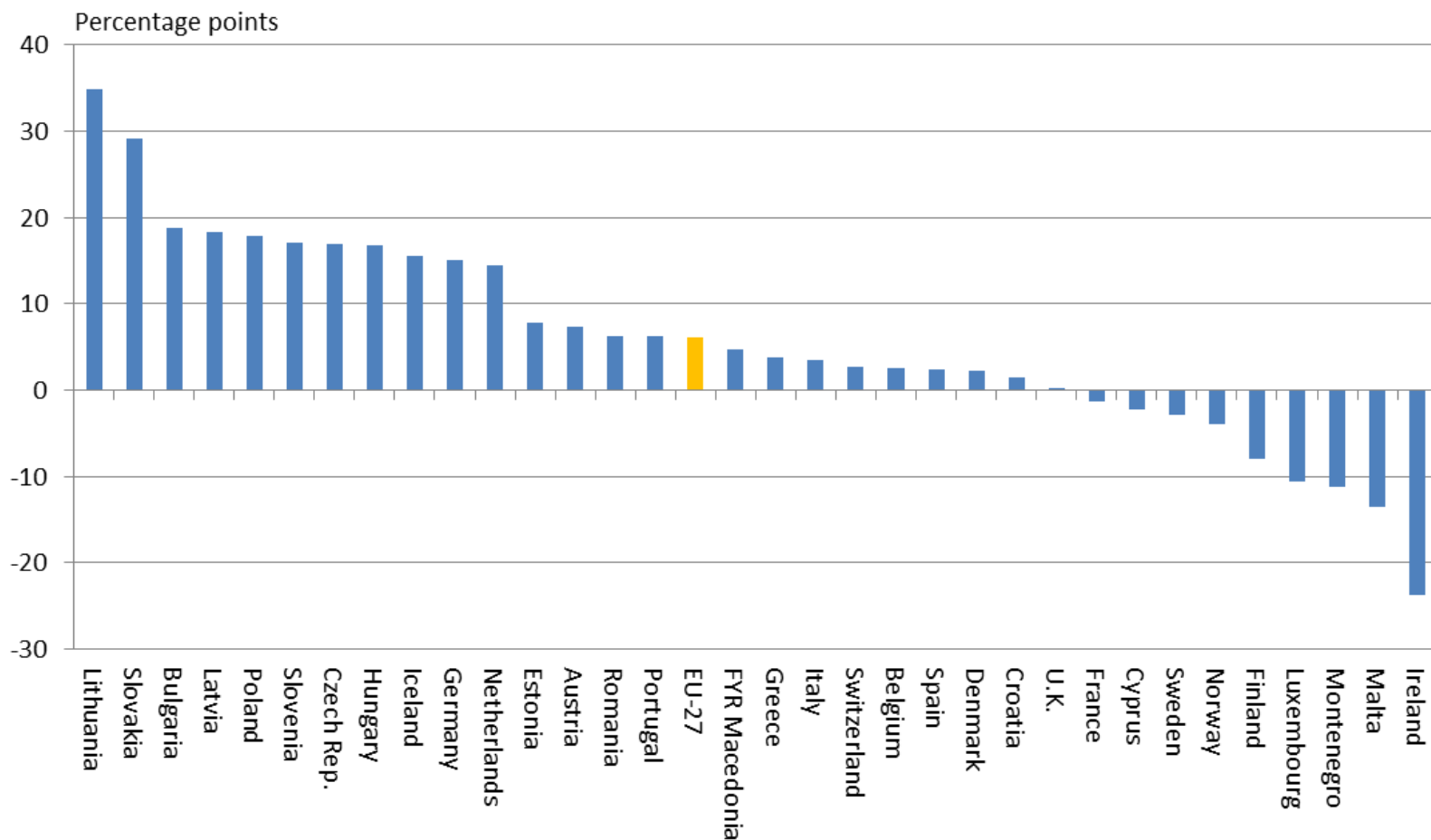
Economic  
growth



# Employment in foreign controlled enterprises as share of total employment



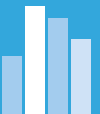
# Share of exports of goods in GDP: change from 2000 - 2012



# Work Package 2: Survey on International organisation and sourcing of business functions

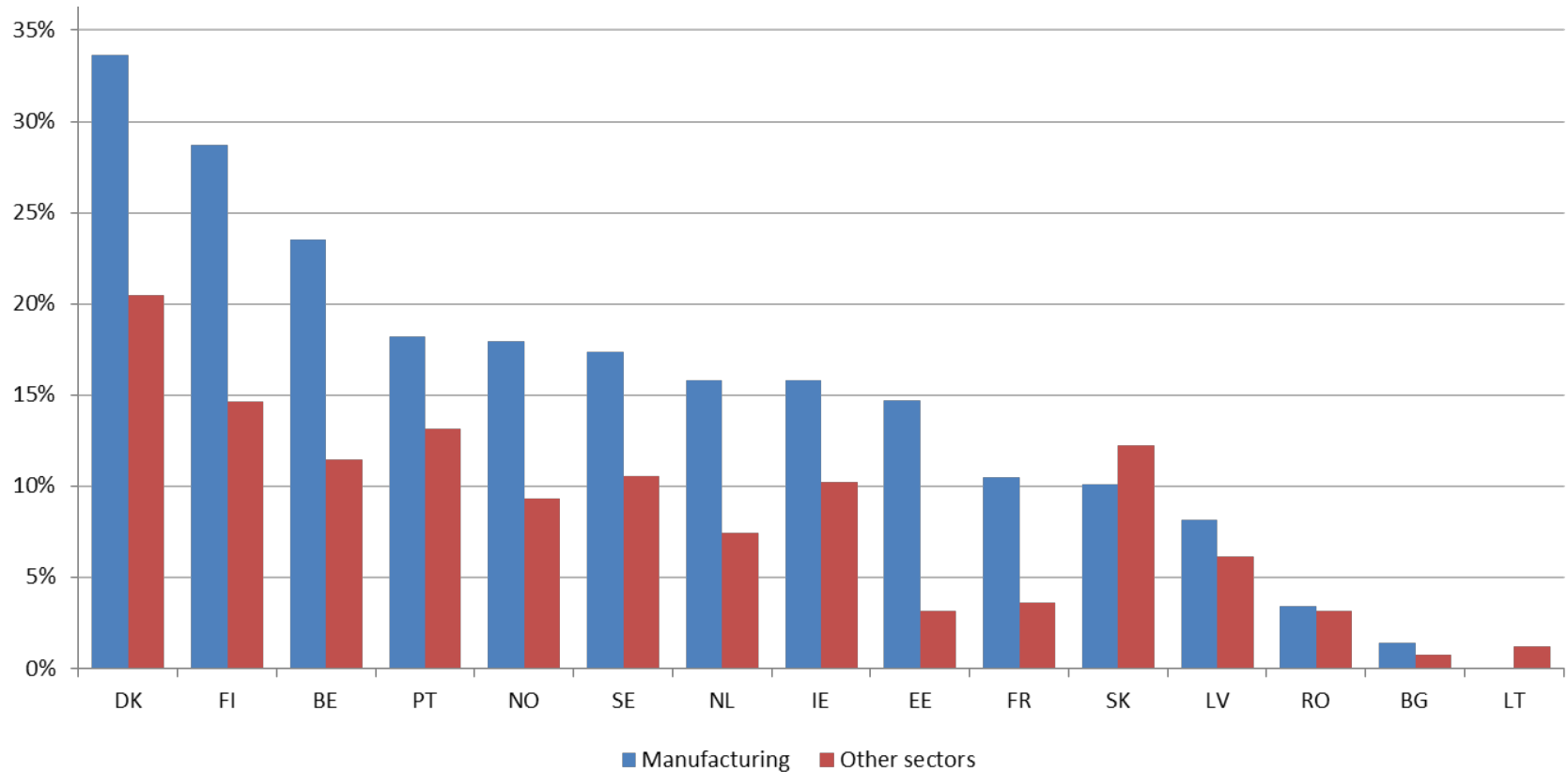
## Policy issues addressed

- How many jobs are moved across borders? Which type of jobs and in which sectors?
- Who are the receiving countries?
- Is there a risk of “hollowing out“ skill based activities?
- What is the impact of international sourcing on the value creation of European firms?
- What are the employment impacts – in terms of job losses or gains?



# Mainly manufacturing enterprises sourcing internationally

Enterprises sourcing internationally 2009-2011 broken down by main sector.  
Share of total number of enterprises in non-financial market economy with 100 or more employees.

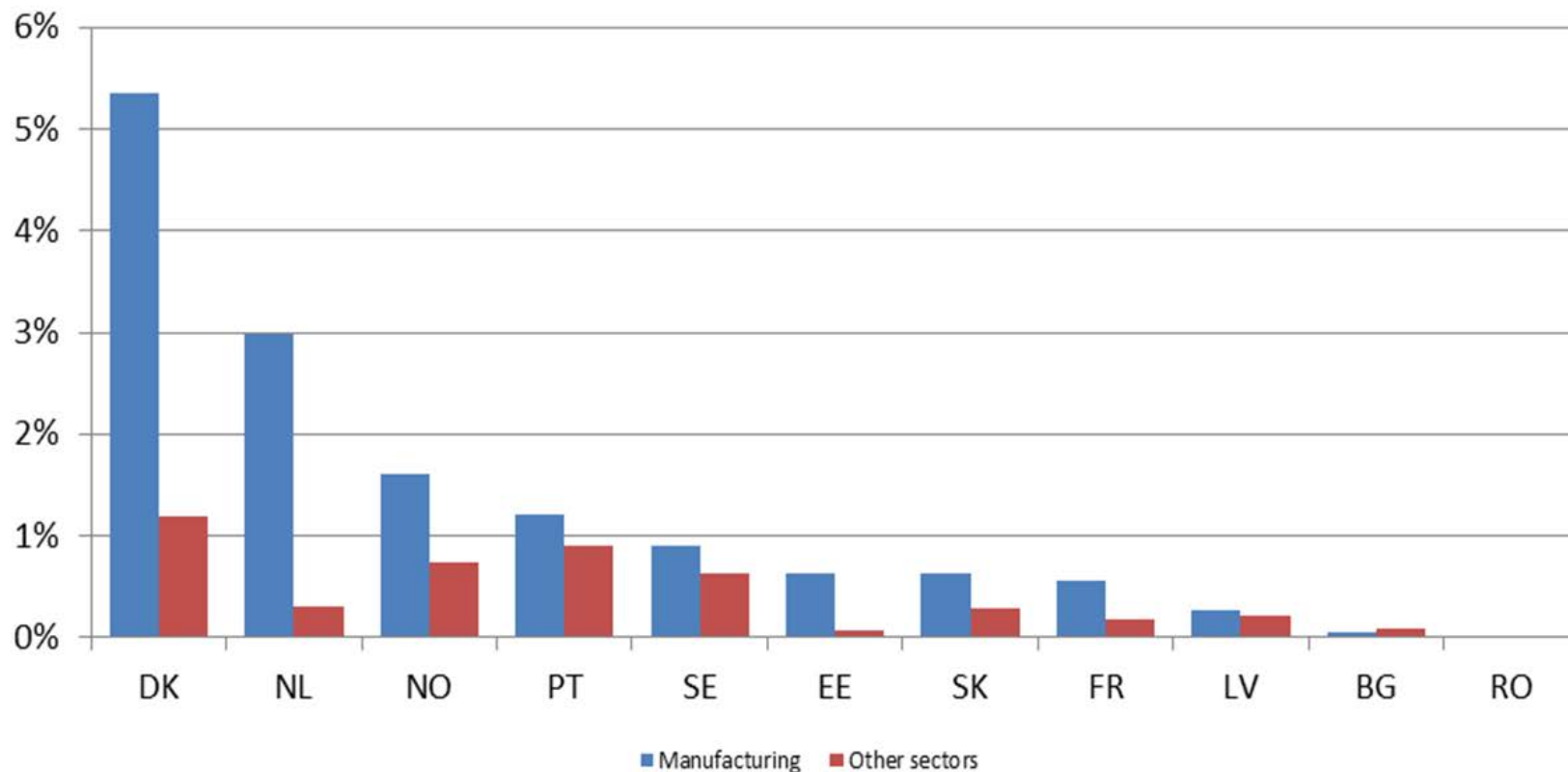


Survey results published by Eurostat,  
*International sourcing of business functions, 2013*



# Job losses due to international sourcing, 2009 - 2011

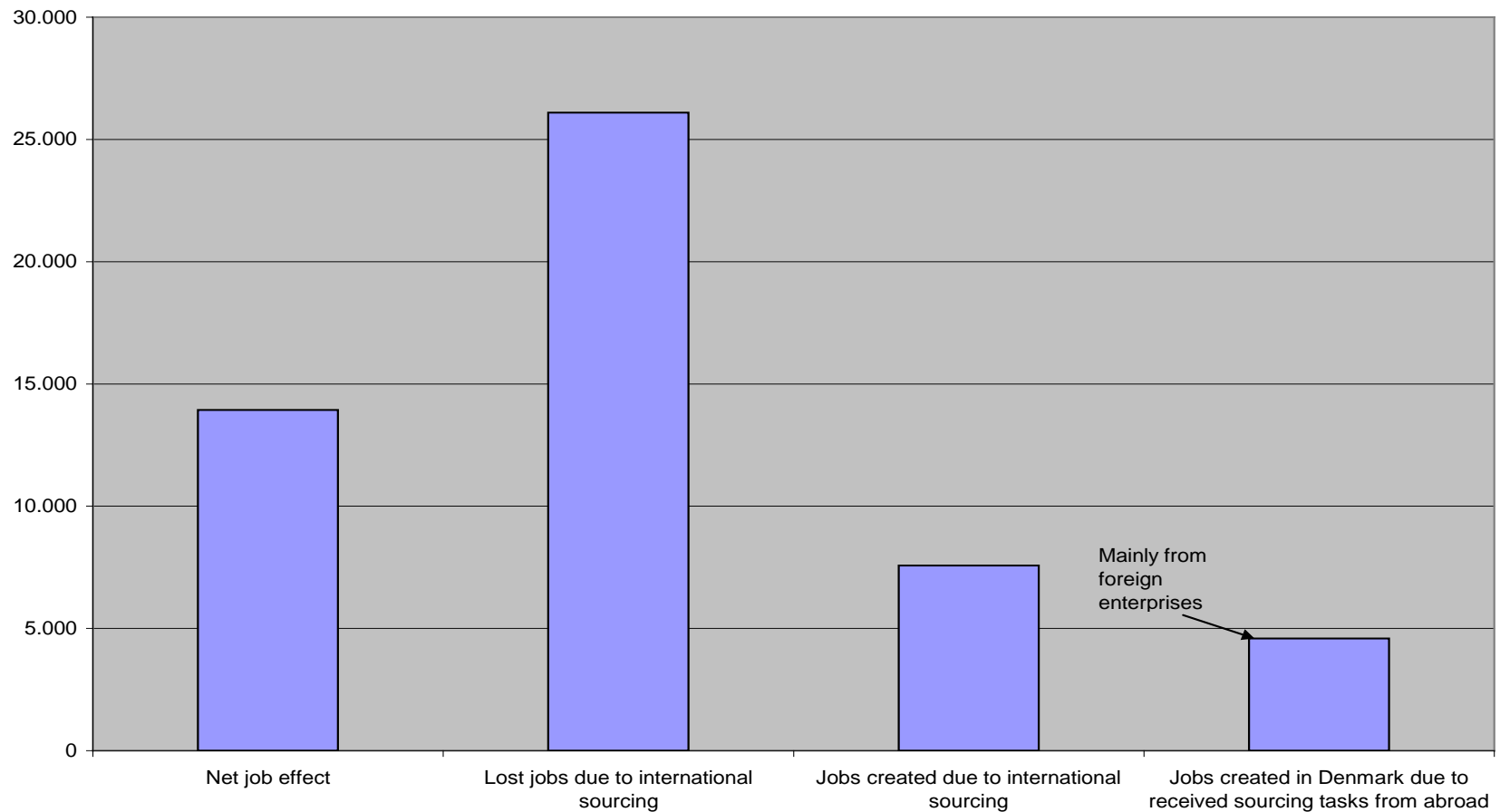
% of number of persons employed in enterprises in non-financial market economy with 100 or more employees. By sector



Survey results published by Eurostat,  
*International sourcing of business functions, 2013*



# Impact of international sourcing on employment: Denmark, 2001-2006



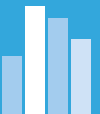
# What are Business Functions?

- Total activity of enterprises can be unbundled into tasks that constitute the necessary inputs for final outputs, including production and supporting tasks
- Aggregation of the tasks performed within the enterprise to functions
- The level is less aggregated than the main activity of the enterprise, but more aggregated than products or tasks
- Business Functions can mainly be seen as a tool to capture the services element in production



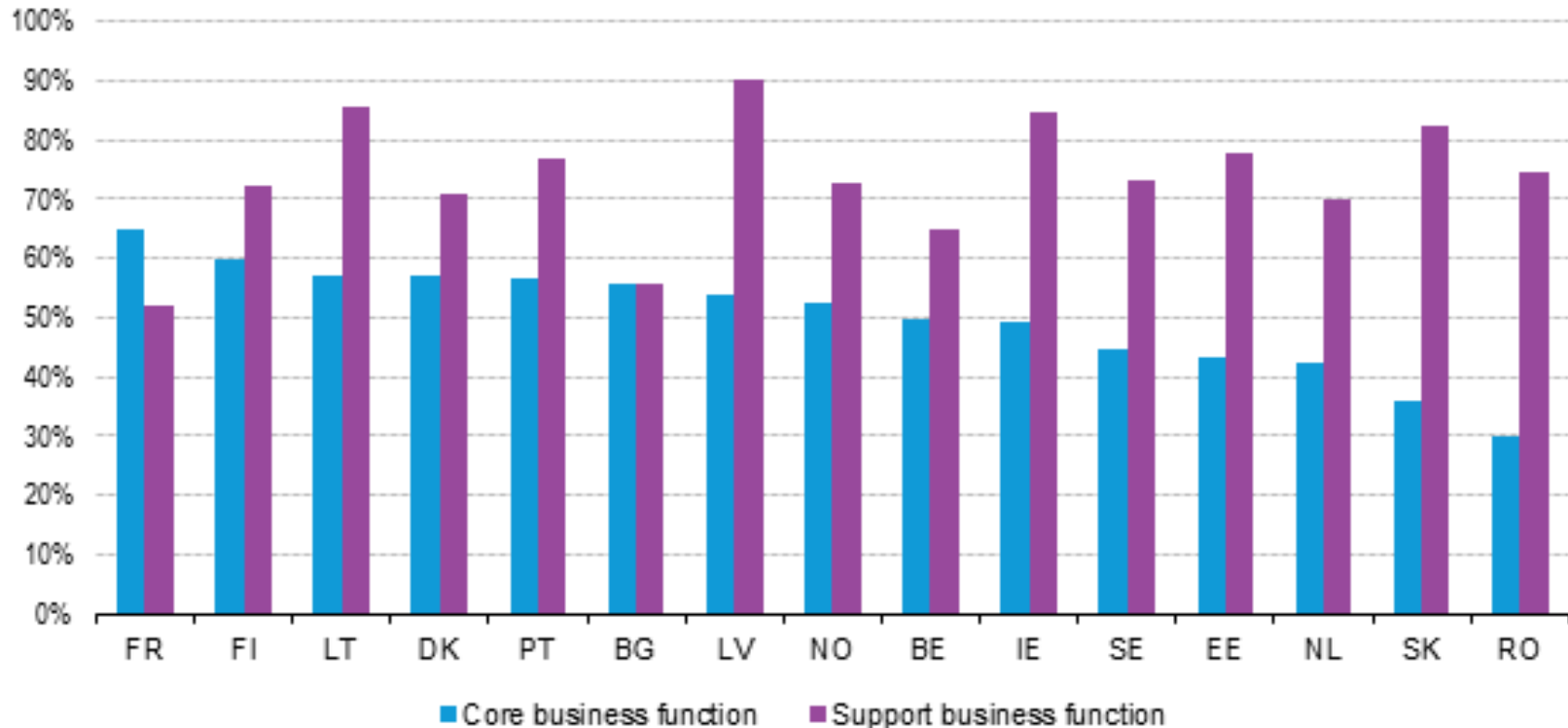
# Opening the black box of the enterprise by introducing Business Functions

- **Core business function:**
  - Production of final goods or services intended for the market/for third parties carried out by the enterprise and yielding income.
- **Support business function:**
  - Support business functions (ancillary activities) are carried out in order to permit or facilitate production of goods or services intended for the market/for third parties by the enterprise.
    - Distribution and logistics
    - Marketing, sales and after sales services
    - ICT services
    - Administrative and management functions
    - Engineering and related technical services
    - Research & Development
    - Other support functions



# International sourcing – by functions

**Enterprises sourcing internationally 2009-2011. Core and support functions.  
Share of internationally sourcing enterprises in non-financial market economy  
with 100 or more employees.**



Survey results published by Eurostat,  
*International sourcing of business functions, 2013*

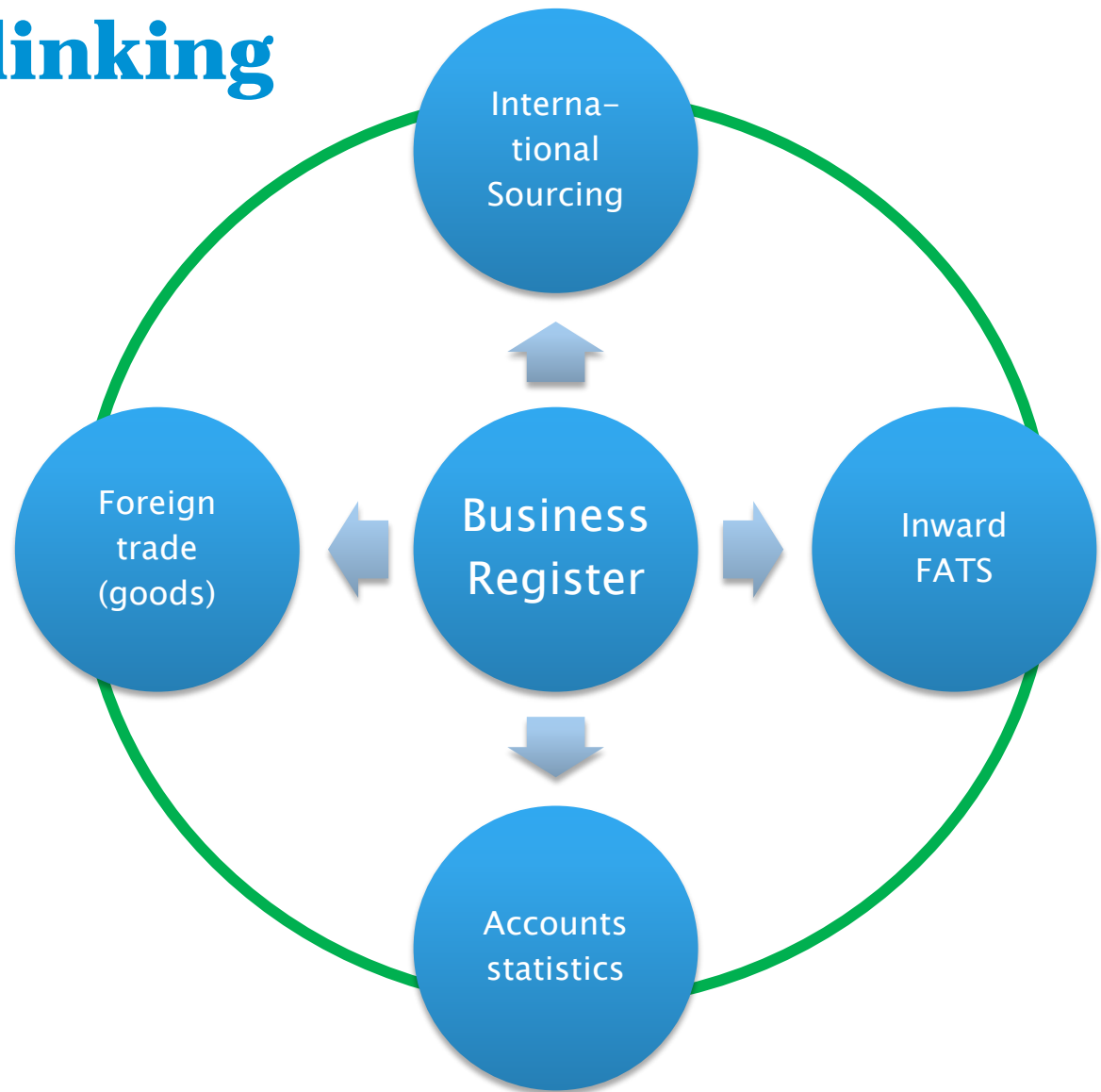
# Work Package 3: Micro data linking

## Reasons for micro data linking

- Establish new knowledge without increasing the respondent burden
- Add value to already collected data by integrating the different registers
- Fine tune surveys by focusing on collecting information which is not available from existing statistical registers

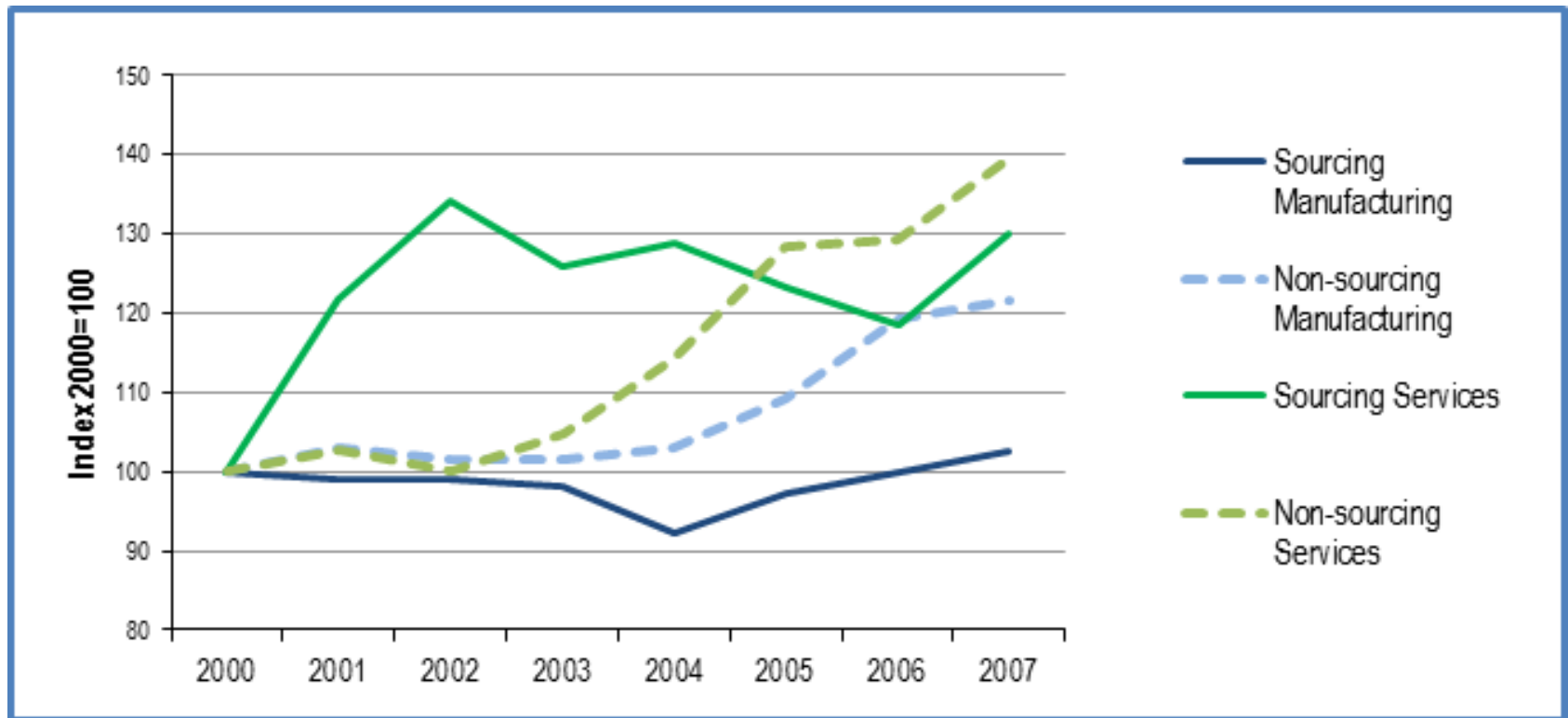


# Micro data linking



# Employment and international sourcing

Results from micro data linking. Denmark, 2001-2007.



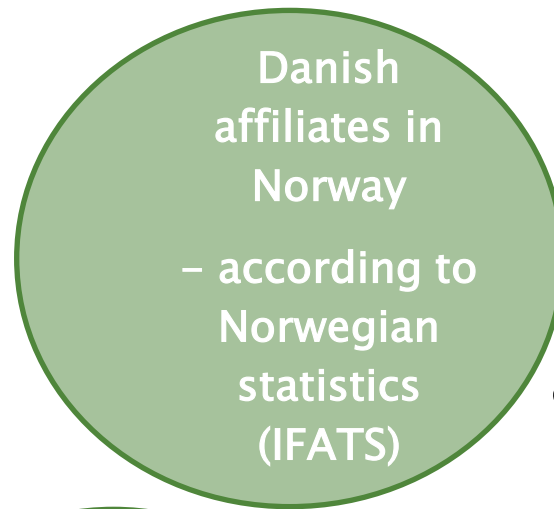
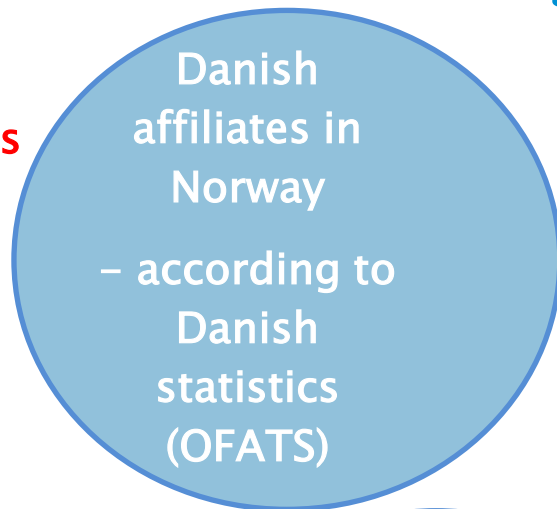


# Wp4: Are we measuring the same thing?

## *Danish affiliates in Norway*

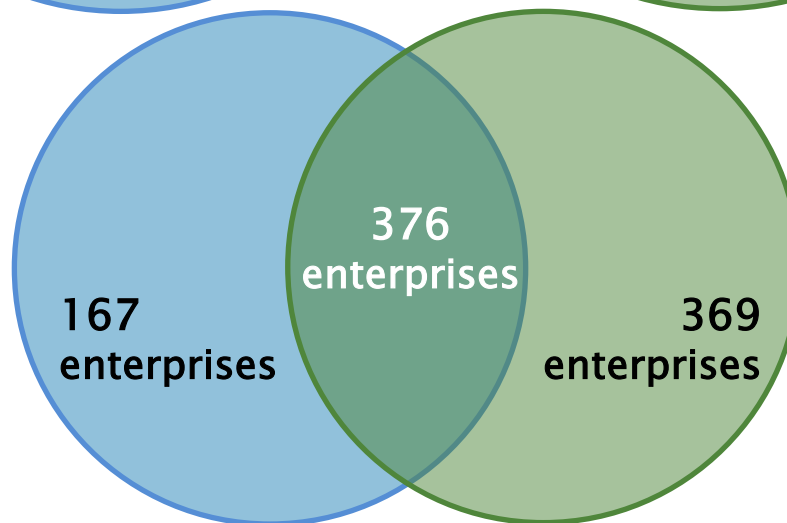
Current statistics  
on Danish affiliates  
in Norway

543  
enterprises



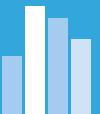
745  
enterprises

Comparison of statistics  
on Danish affiliates  
in Norway



# Summing up: Main issues to be addressed

- How to address the global fragmentation of the production processes?
- How do we improve the integration of business and economic statistics?
- In a regime of budget constraints, how do we ensure resources for development of globalisation statistics?
- What is the impact of globalisation on the division of labour between national and international institutes?



# Thank you!