Socio-economic satellite accounts –
Construction and stylized facts

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Socio-economic satellite accounts (WIOD SEA)

- **Capital stock**
  - Gross fixed capital formation (in current and constant prices)
  - Capital stock
  - Capital compensation
  - Sources: EU KLEMS, OECD STAN, national sources

- **Employment data**
  - Number of persons employed, hours worked
  - Labour compensation
  - By educational attainment levels (high, medium, low according to ISCED 0-2, 3-4, 5-6)
  - Sources: EU KLEMS, EU LFS, OECD STAN, national sources

- **Deflators**
  - Consistent with NatSUTs, IntSUTs, and WIOTs
  - Details: Erumban et al. (2012)
SEA: What to be used for?

- Role of relative factor endowments and their changes
  - Skill upgrading
  - Industry patterns of skills
- Effects of factor and sector biased technical change and convergence
- Effects of trade and off-shoring on labour demand
  - Levels by skills
  - Relative wages
- Role of countries in the global division of labour
- Calculations of TFP, LP, ULCs, etc.
  - Evolution of absolute and comparative advantages
  - Sector level productivity changes
  - Specialization dynamics
Employment in WIOD countries

Persons employed (in mn) 1995=1
Employment structures 2009, in %

Employment by education

Labour demand: regional shares
Changes in employment levels, 1995-2009
Value added, employment and labour income

Average annual growth rates

Share of labour compensation in VA
Foreign content of exports, 1995-2009

Foreign output needed to produce a country’s exports in % of foreign and domestic production needed for exports

Source: WIOD database, own calculations.
Foreign content of exports, 1995-2007

Source: WIOD database, own calculations.
Trade in factors and factors in trade, EU extra
(Foster and Stehrer, 2012; Stehrer, 2012)

in bn US-

in mn persons employed
Offshoring, jobs and trade-in-tasks

Results from a (preliminary) counterfactual analysis by occupations
(Stehrer and Stöllinger, 2012)

in mn persons

in %
Offshoring, trade and employment

(Foster et al, 2012a and 2012b)

- **Offshoring and employment levels**
  - **Productivity effect** which tends to have negative effect on labour demand
  - **Scale effect** which tends to have positive effect on labour demand
  - Results suggest that the scale effect is dominates the productivity effect
  - Results tend to hold also for various types of workers (by educational groups)

- **Offshoring and employment structures**
  - Tends to squeeze out medium-educated in cost shares
  - In line with hypothesis that offshoring squeezes out the middle (as these are the offshoreable jobs)

- **Trade has little total effects on employment**
  - Trade is not main explanation for worsening employment performance
Summary/Conclusions

- Global shifts in labour demand (and supply) to high educated workers
  - Particularly in emerging economies
  - Though still important structural differences in relative endowments

- Share of labour income in value added falling
  - Less pronounced in the EU

- Rising income differences (skill premium)
  - Various factors (SBTC, structural shifts, etc.)
  - But not common trend across regions/countries

- EU as a net exporter of labour in value terms

- EU as a net importer of (particularly low skilled) labour in physical terms

- Trade has little effect on employment levels
  - Evidence of trade for 'squeezing out' the middle
References


Foster, N. and R. Stehrer (2012), HOV with technology and consumption dissimilarity, Manuscript.
