



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)

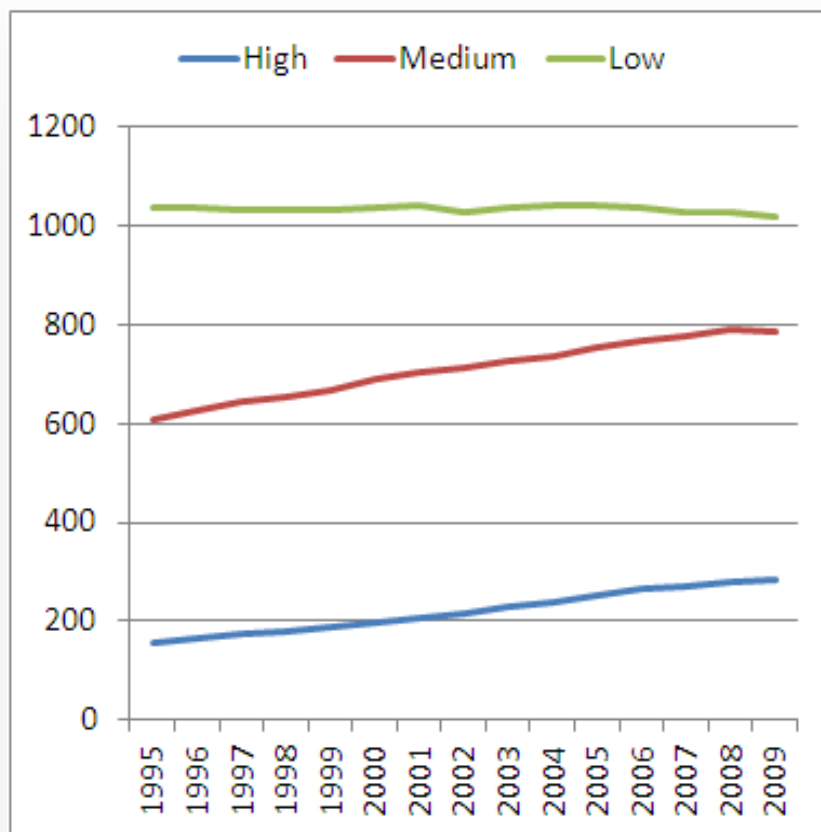
SEA: What to be used for?

- 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

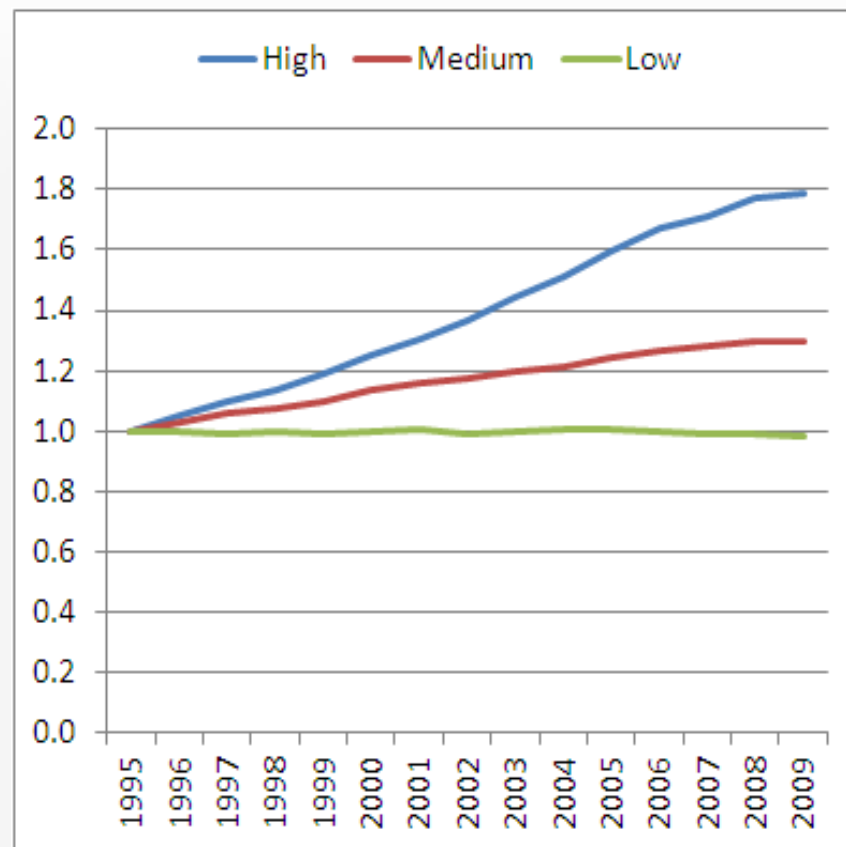
Employment in WIOD countries



Persons employed (in mn)

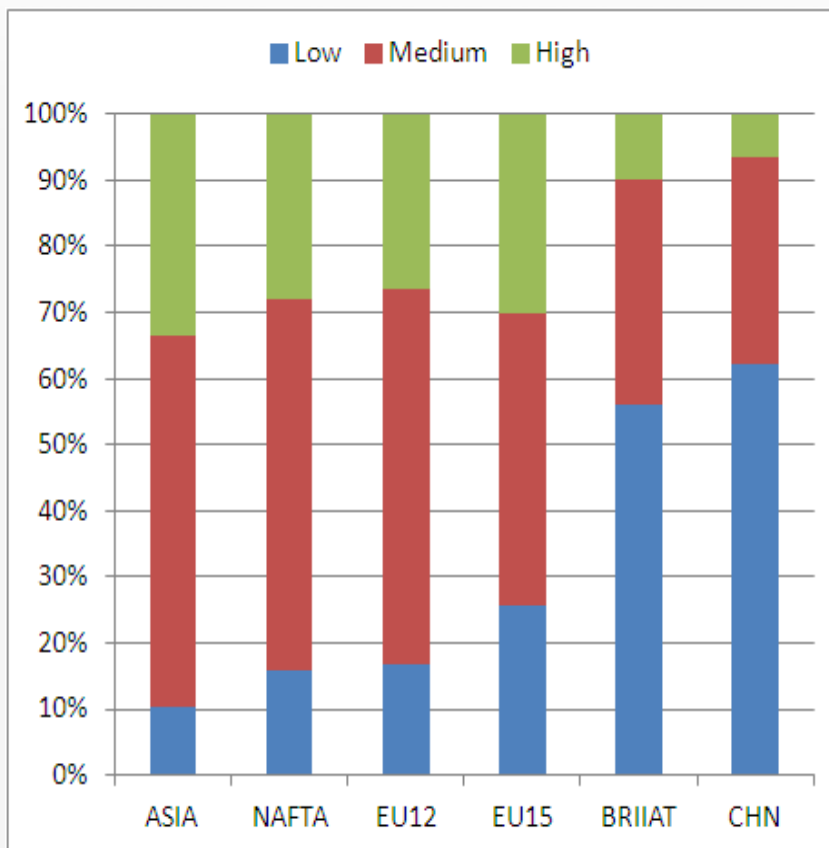


1995=1

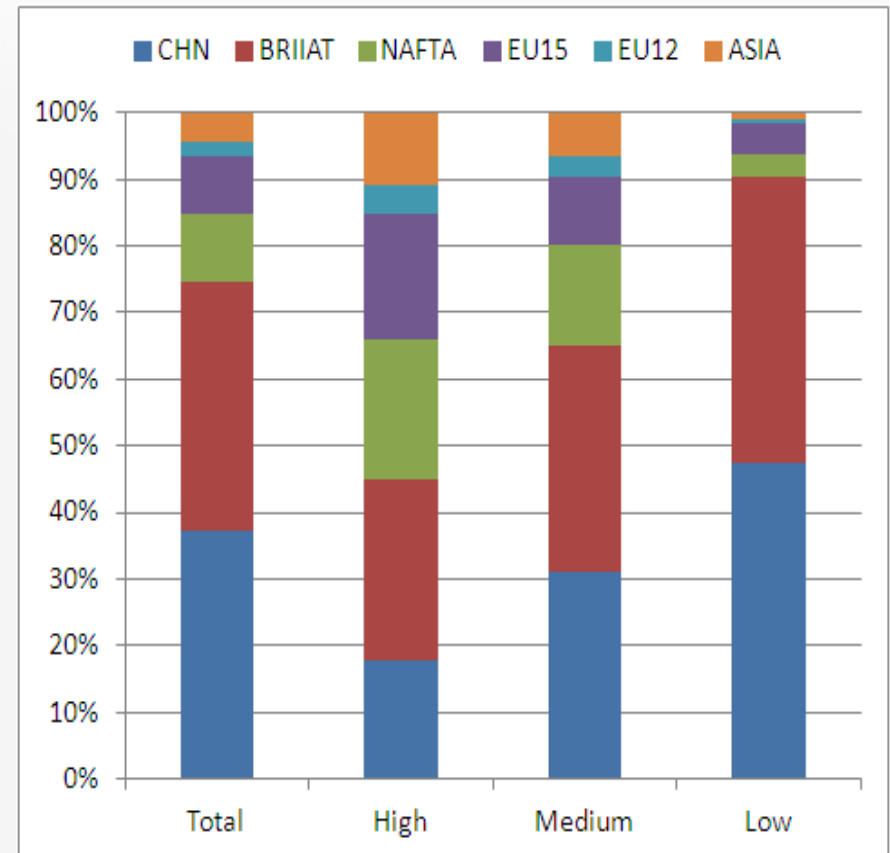


Employment structures 2009, in %

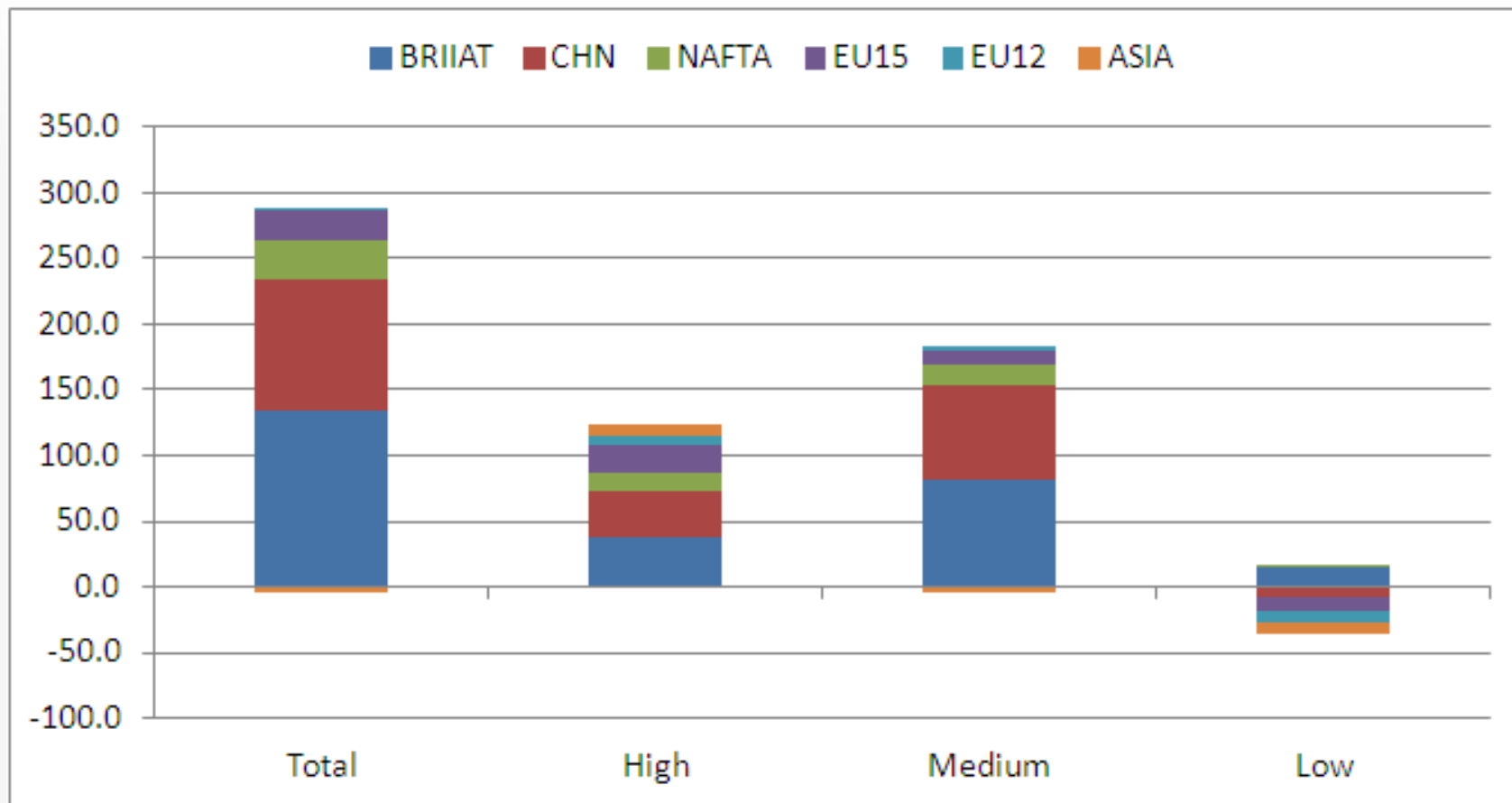
Employment by education



Labour demand: regional shares



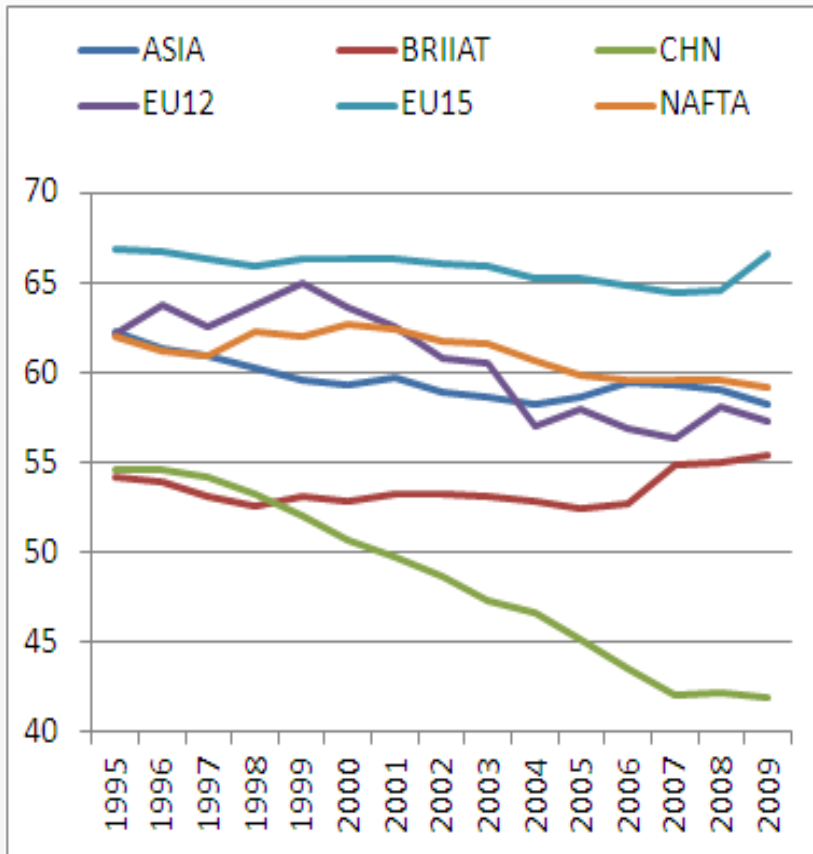
Changes in employment levels, 1995-2009



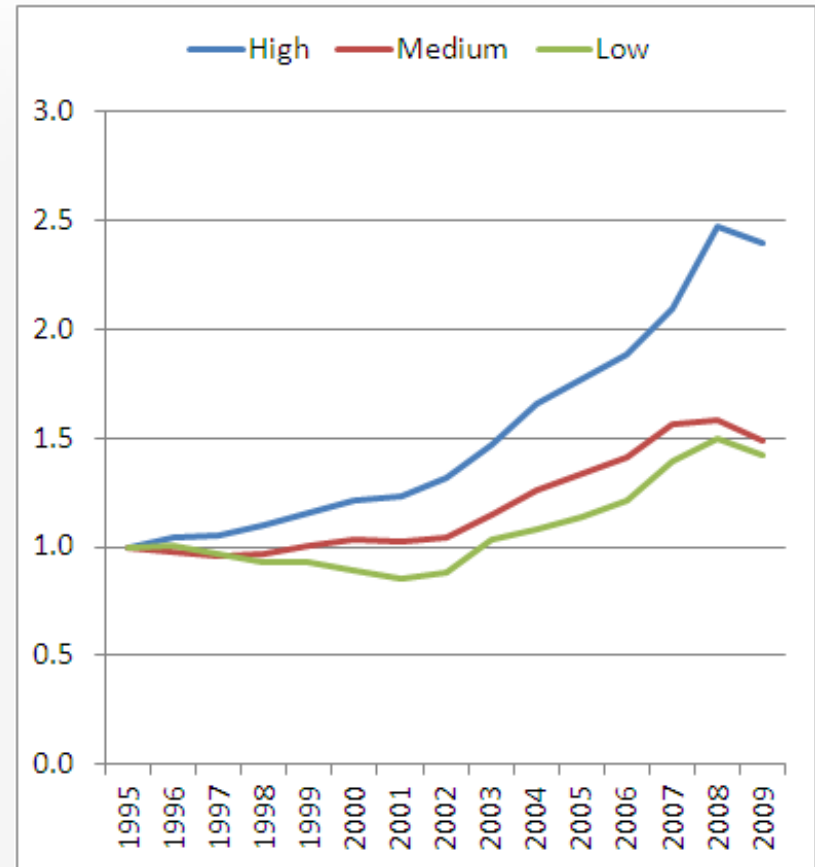
Labour compensation in VA



Share in VA



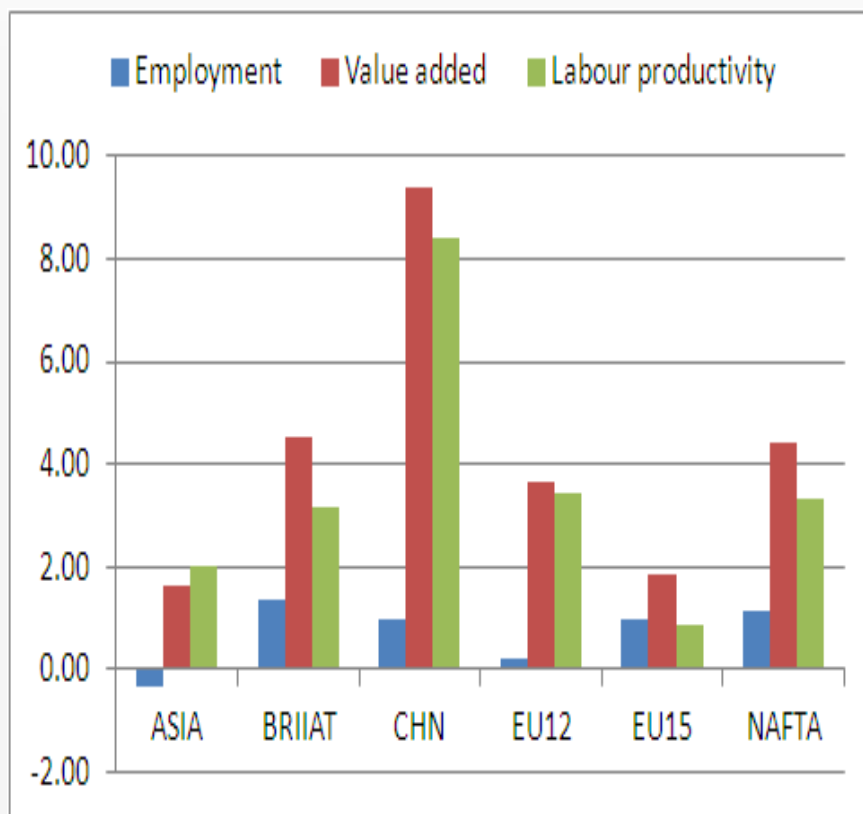
by education, 1995=1



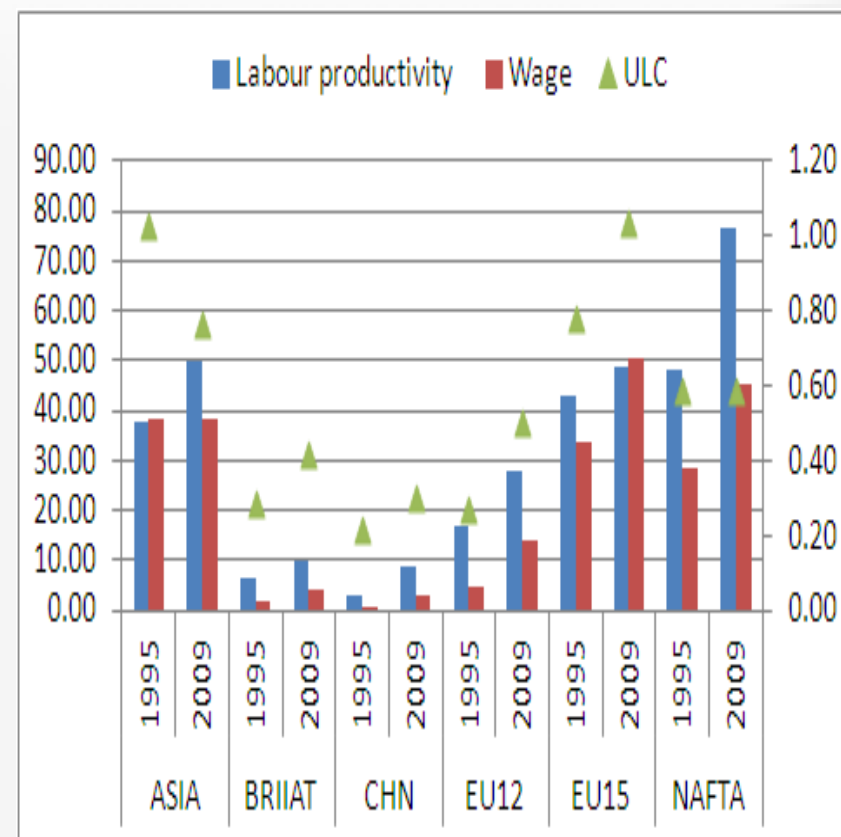
Value added, employment and labour income



Average annual growth rates

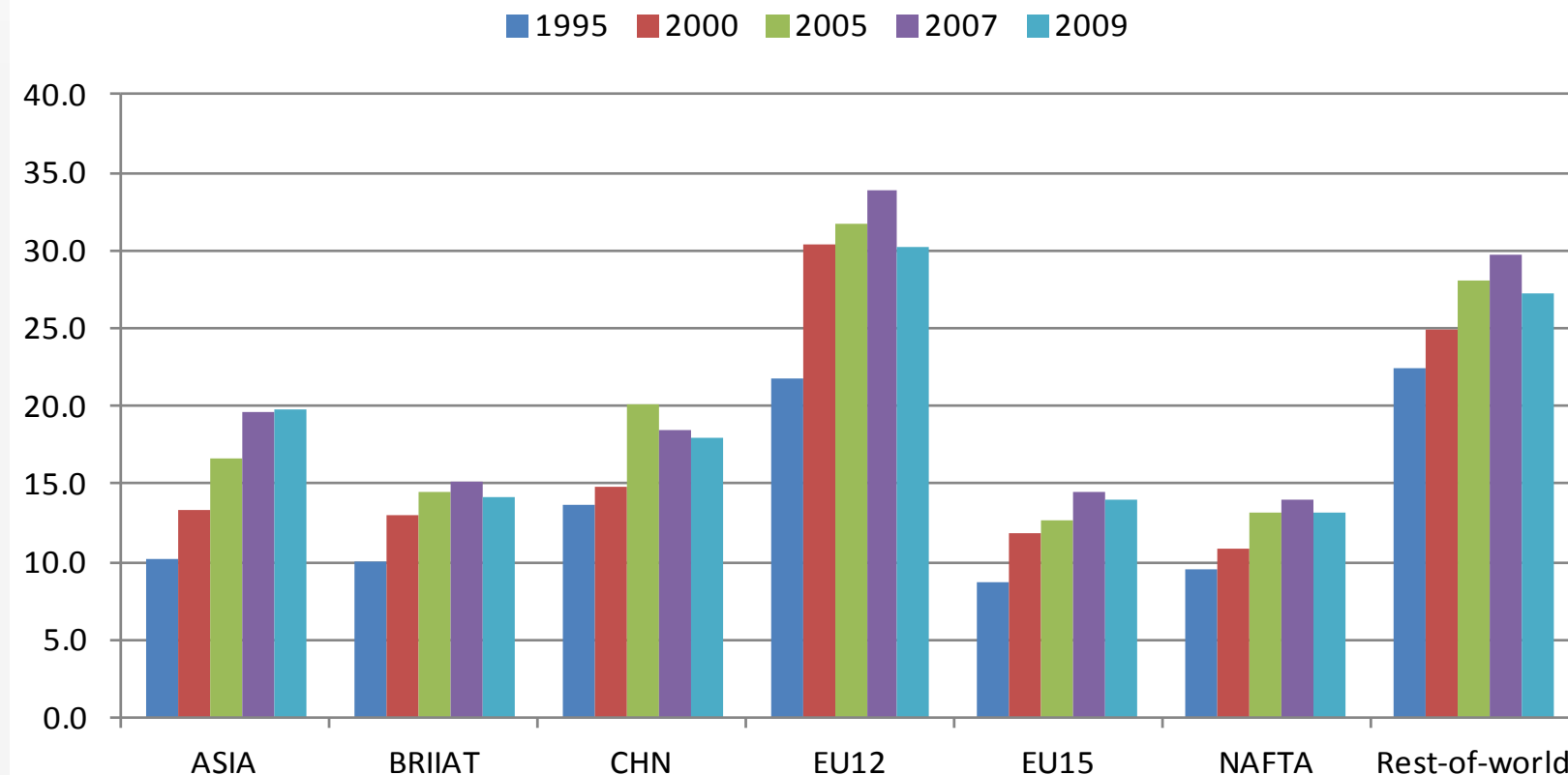


Share of labour compensation in VA

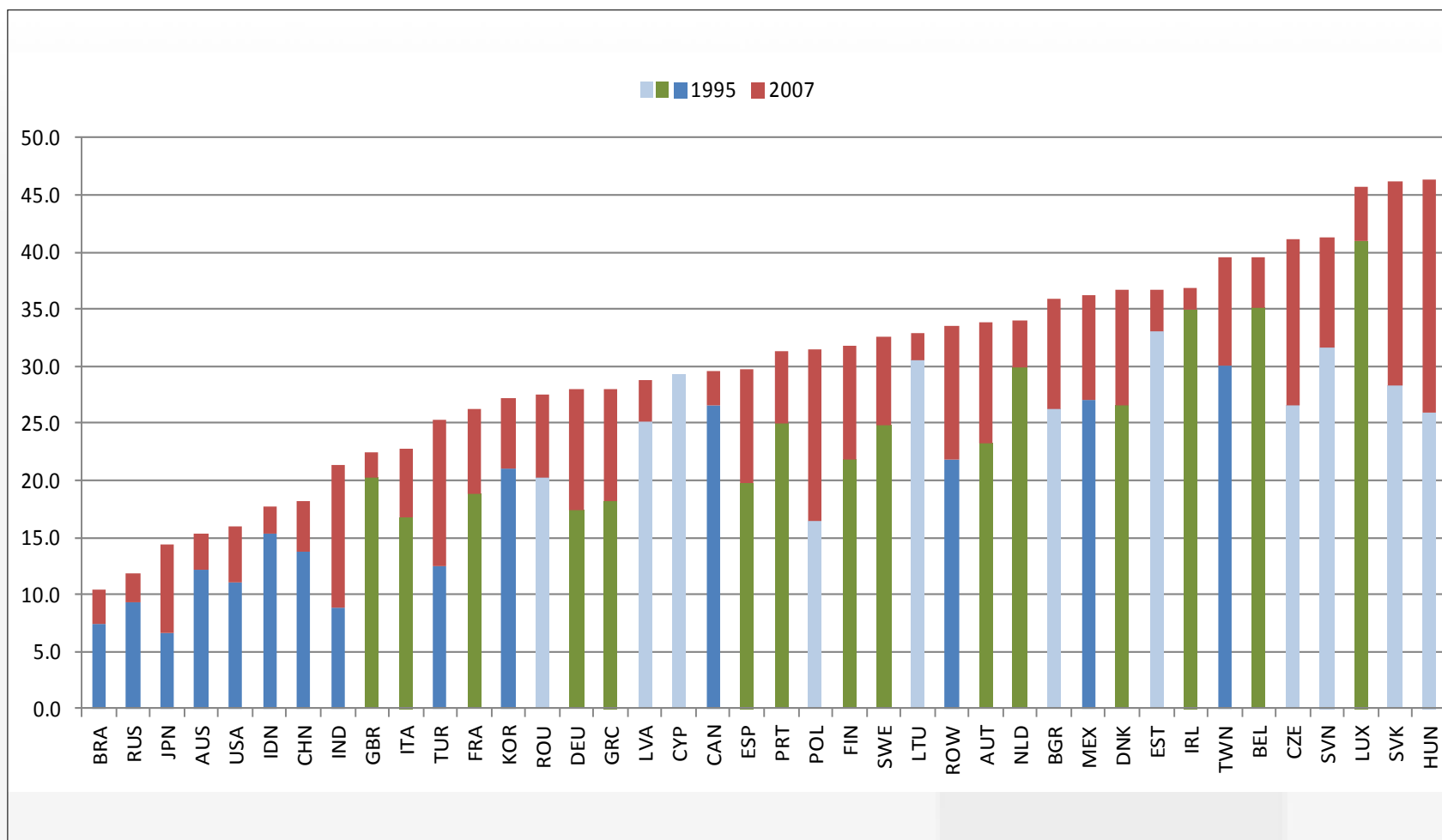


Foreign content of exports, 1995-2009

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



Foreign content of exports, 1995-2007



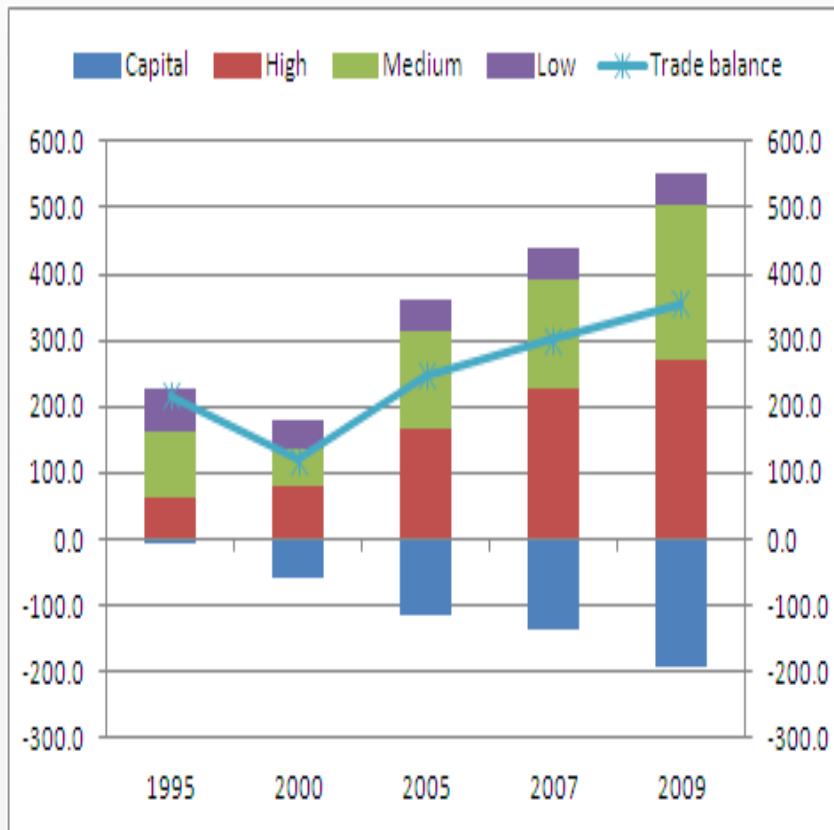
10Source: WIOD database, own calculations.

Trade in factors and factors in trade, EU extra

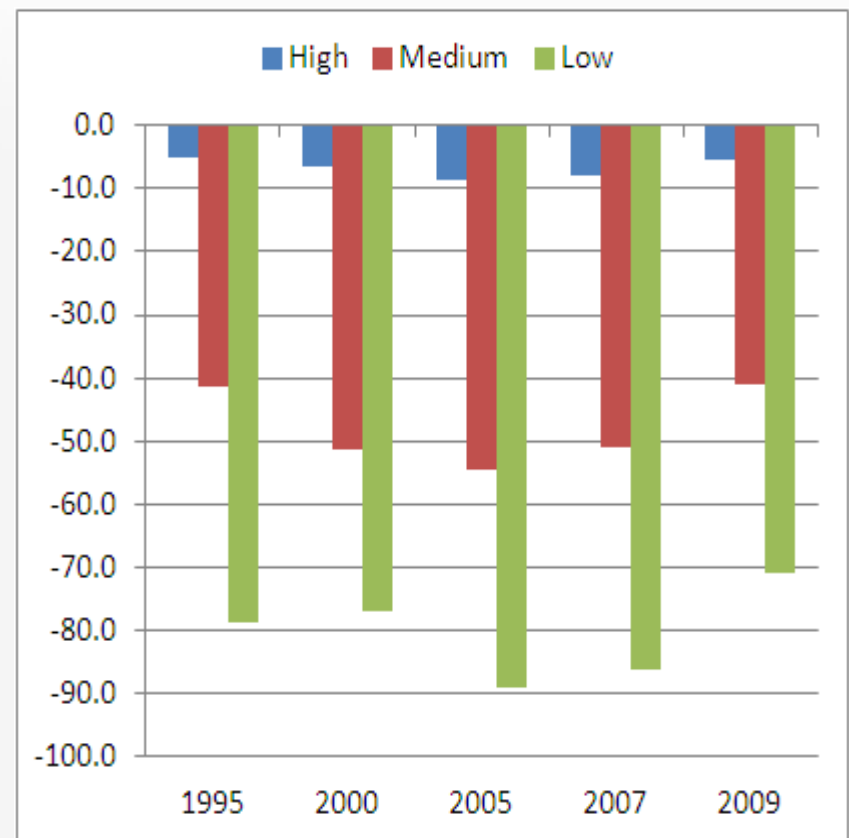
(Foster and Stehrer, 2012; Stehrer, 2012)



in bn US-\$



in mn persons employed



Offshoring, jobs and trade-in-tasks

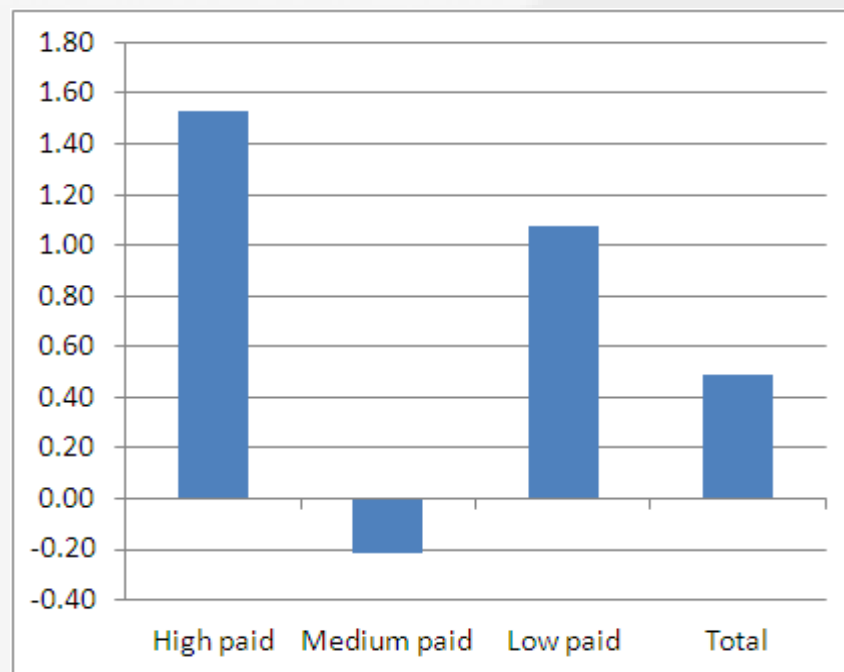
Results from a (preliminary) counterfactual analysis by occupations

(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 offshorable 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

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