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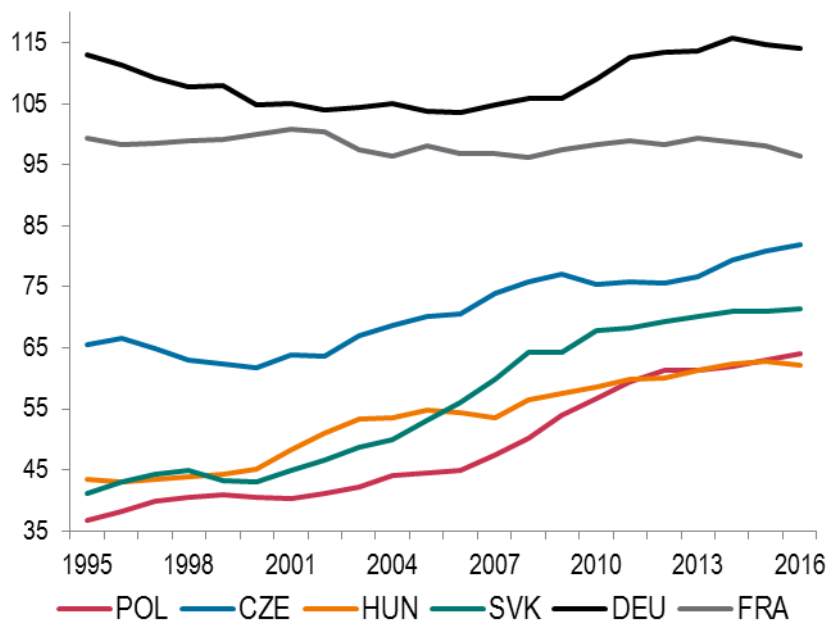
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# Current and future sources of growth in Central and Eastern Europe

\* The views presented here are mine and do not necessarily reflect the official position of the NBP

# Introduction

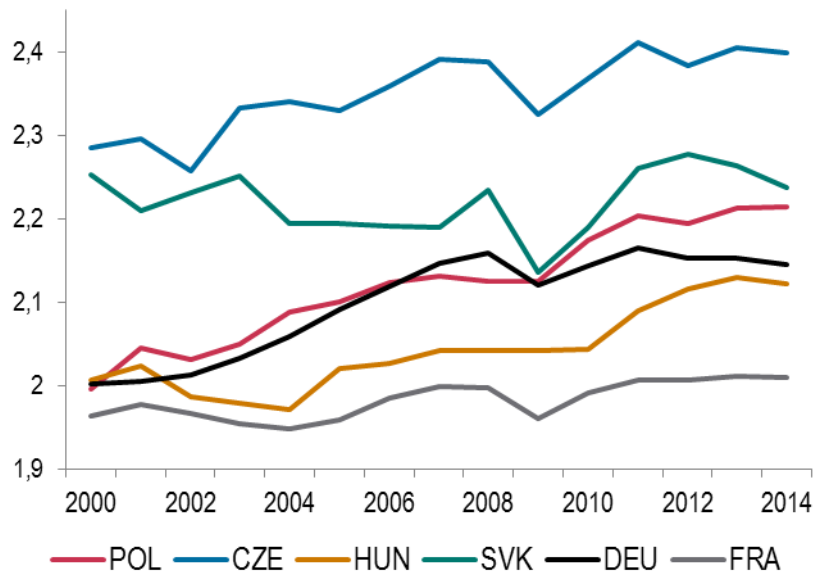
Relative GDP per capita PPP (EU15=100)



- Substantial convergence of Poland and other CEE countries have substantially converged to the EU average
- The dominant role of capital deepening and TFP due to influx of foreign direct investment as well as knowledge spillovers and technology adoption
- Private consumption and investment have played crucial role in catching-up process in CEE countries
- The role of exports and global value chains in GDP/value added growth
- Future sources of growth

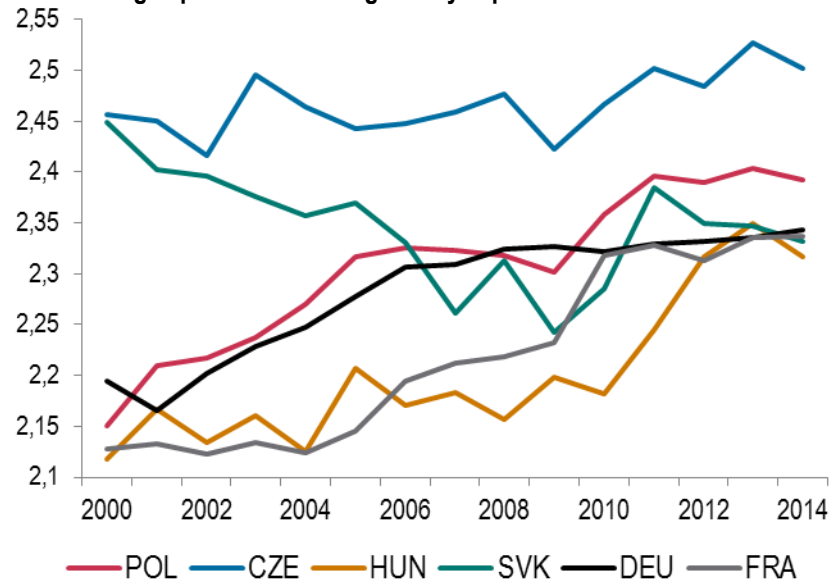
## Fragmentation: production in CEE has moved further away from final demand

Average upstreamness weighted by output



Source: NBP's calculations based on WIOD data (Antras et al. 2012 method).

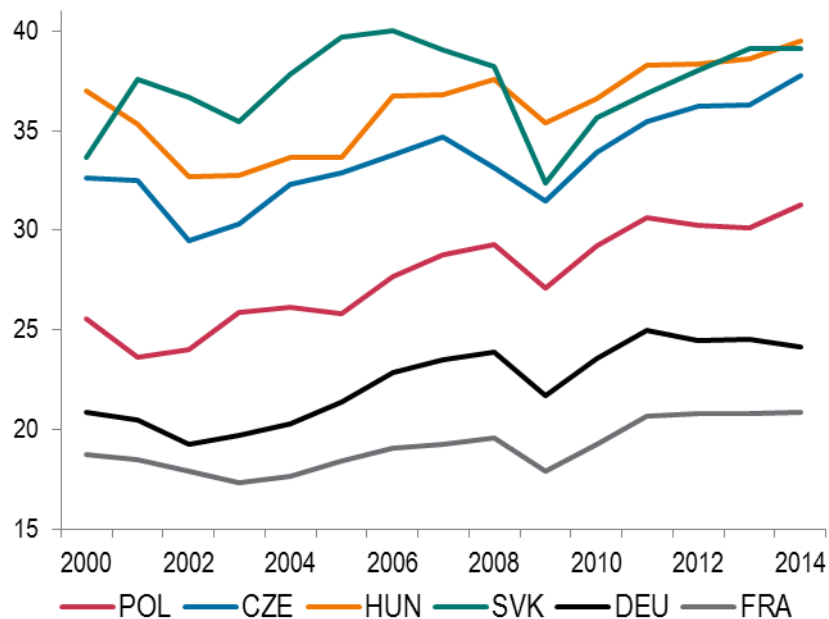
Average upstreamness weighted by export



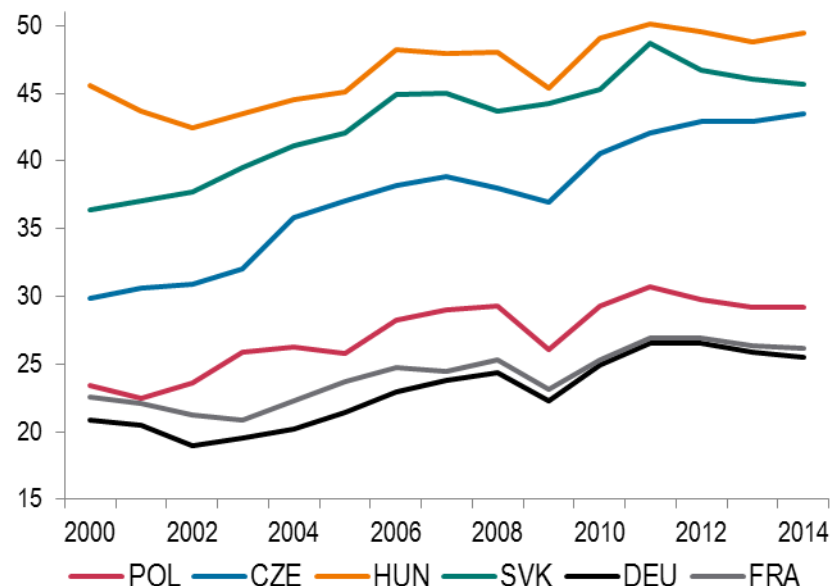
Source: NBP's calculations based on WIOD data (Antras et al. 2012 method)

## Vertical specialization: more (intermediate) imports in exports, more imports in final demand

Import content of final demand (in %)



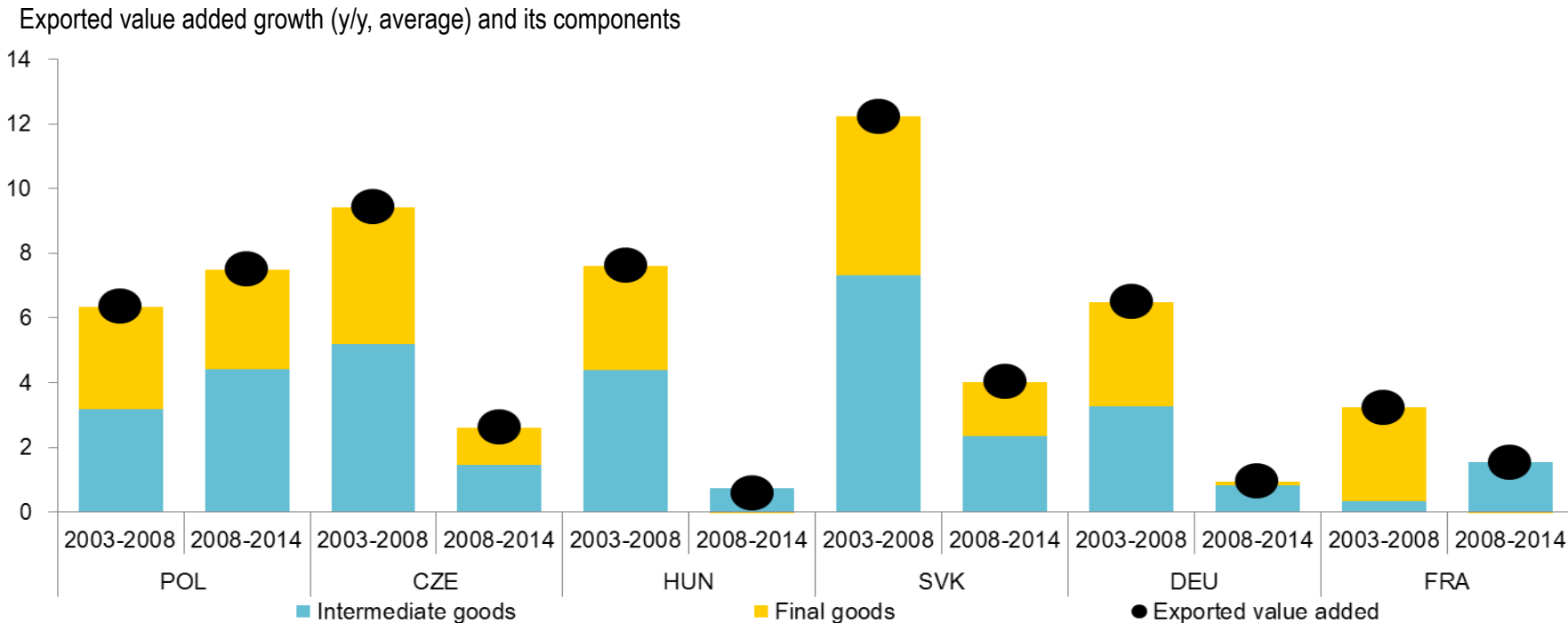
Import content of gross export (foreign value added in export, in %)



Source: NBP's calculations based on WIOD data.

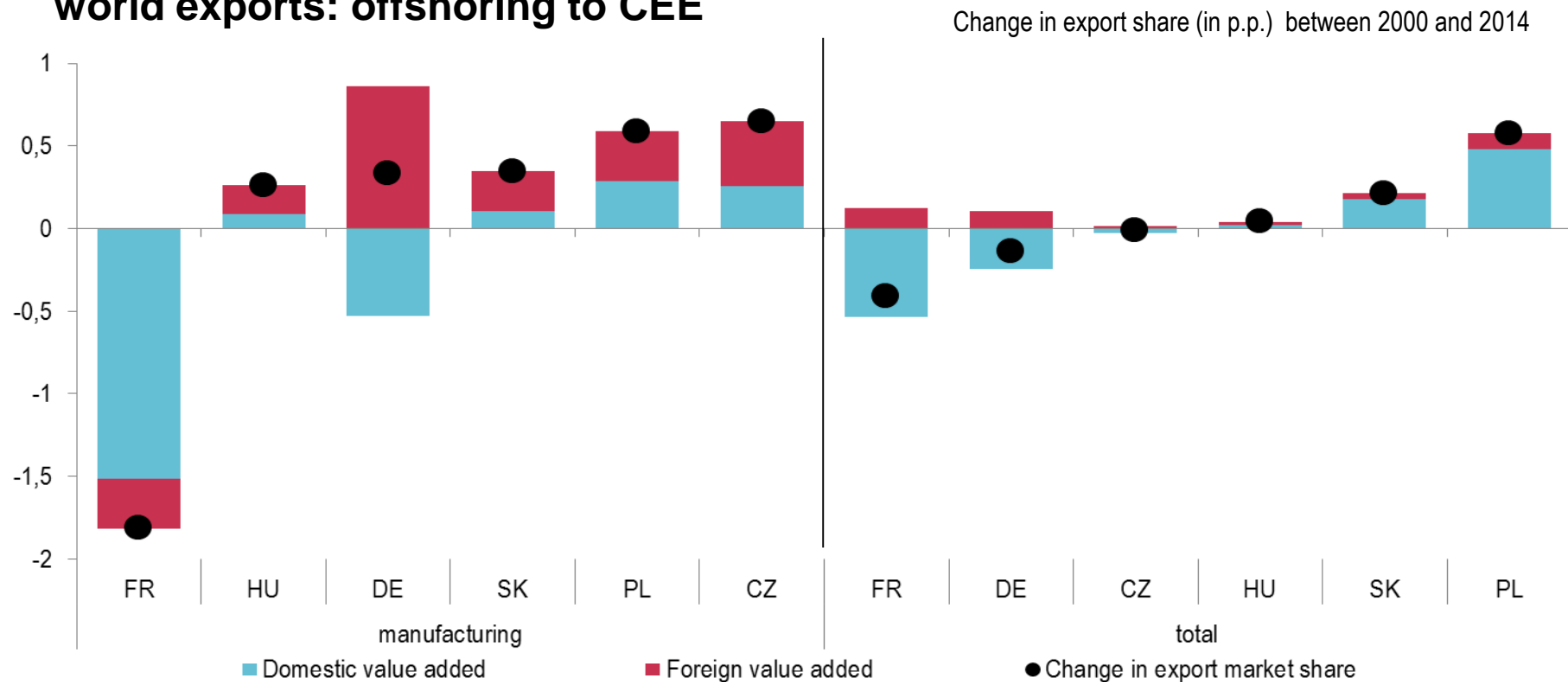
Source: NBP's calculations based on WIOD data.

## Growth in exported value added is mostly driven by exports of intermediate goods



Source: NBP's calculations based on WIOD data.

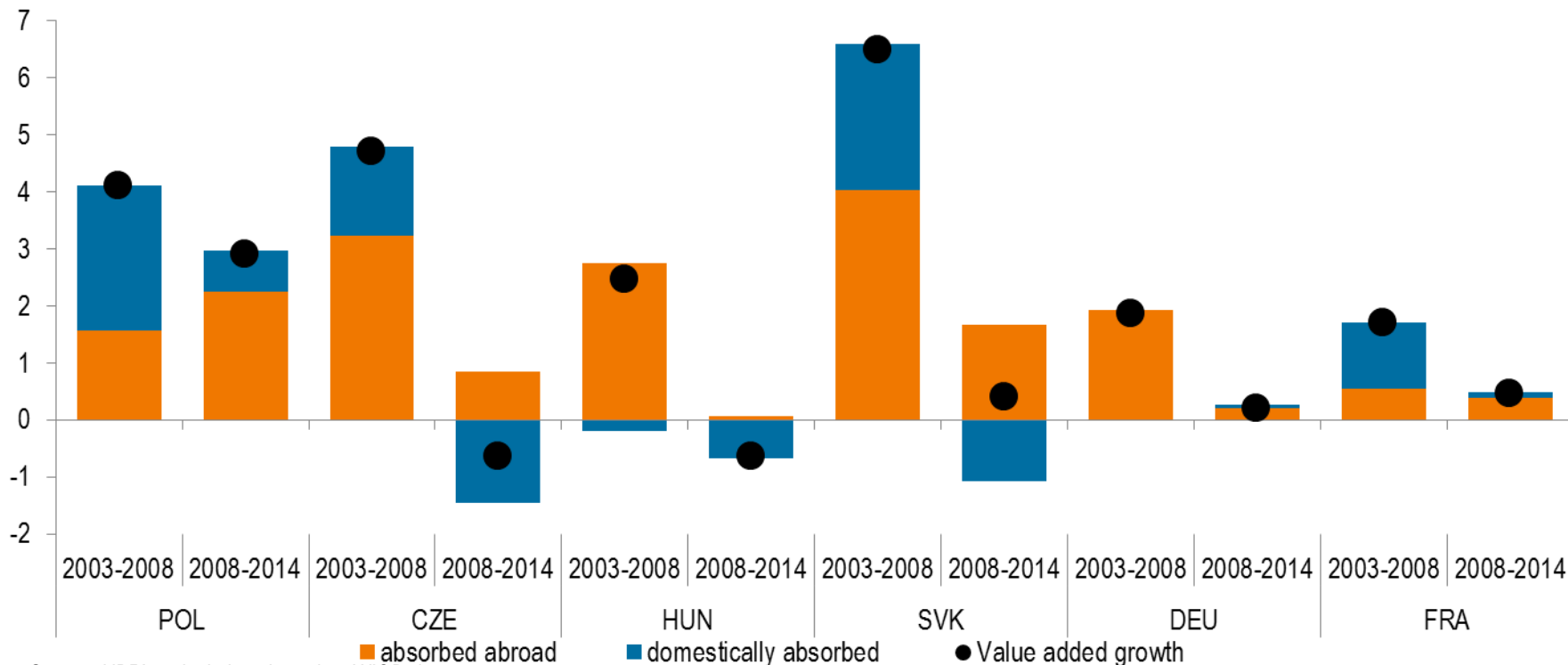
# Non-negligible role of vertical integration in changes in shares in total world exports: offshoring to CEE



Source: NBP's calculations based on WIOD data.

## Foreign sales have played dominant role in the GDP growth but after the great trade collapse their importance has become heterogeneous amongst the CEE economies

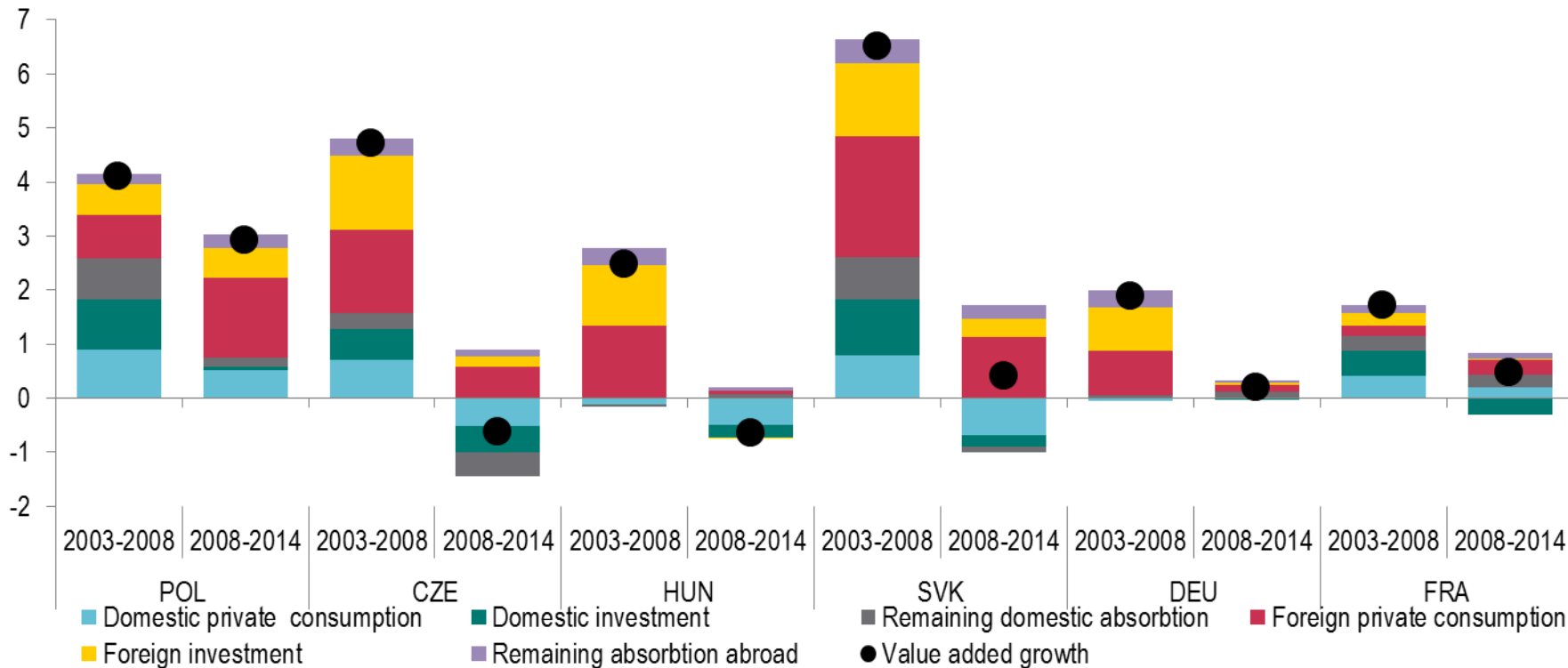
Value added growth and its components (y/y, average)



Source: NBP's calculations based on WIOD data.

# After the GFC foreign consumption was the most important growth driver of CEE

Value added growth and its components (y/y, average)

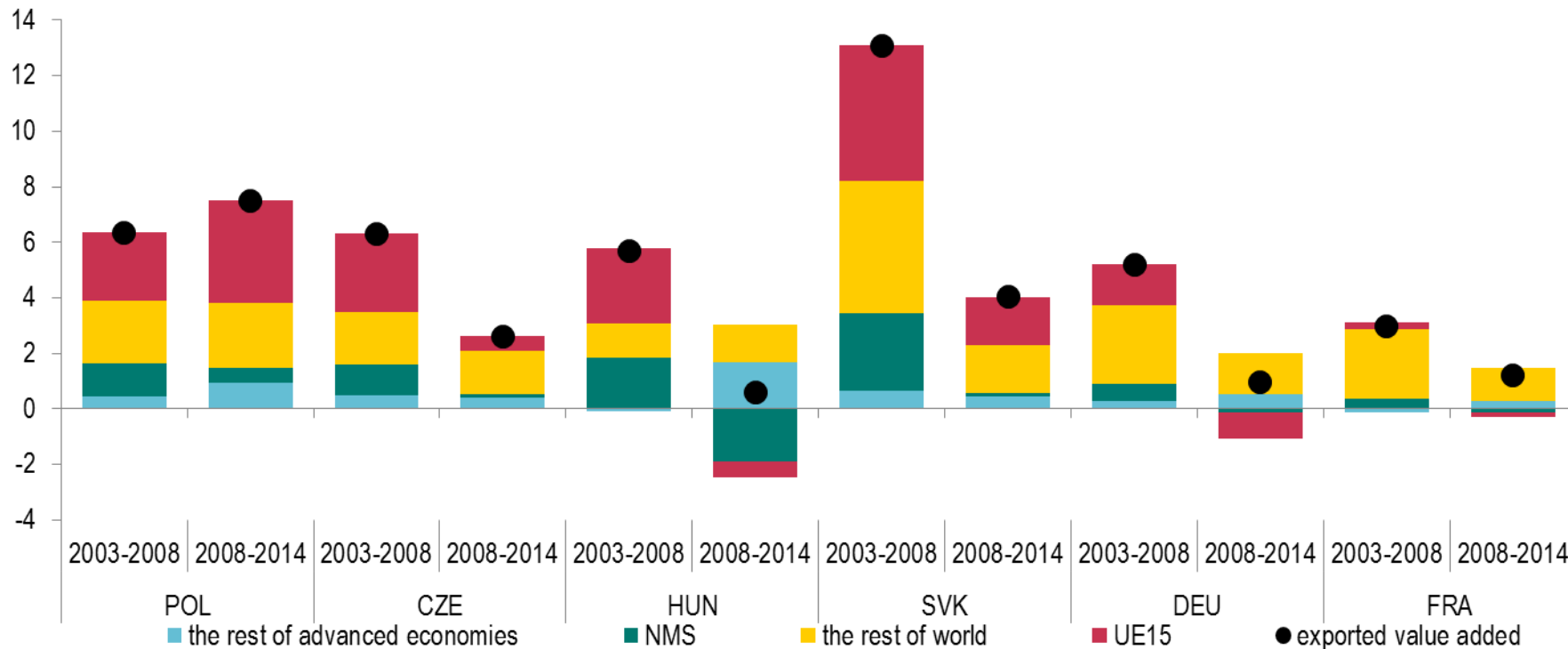


Source: NBP's calculations based on WIOD data.

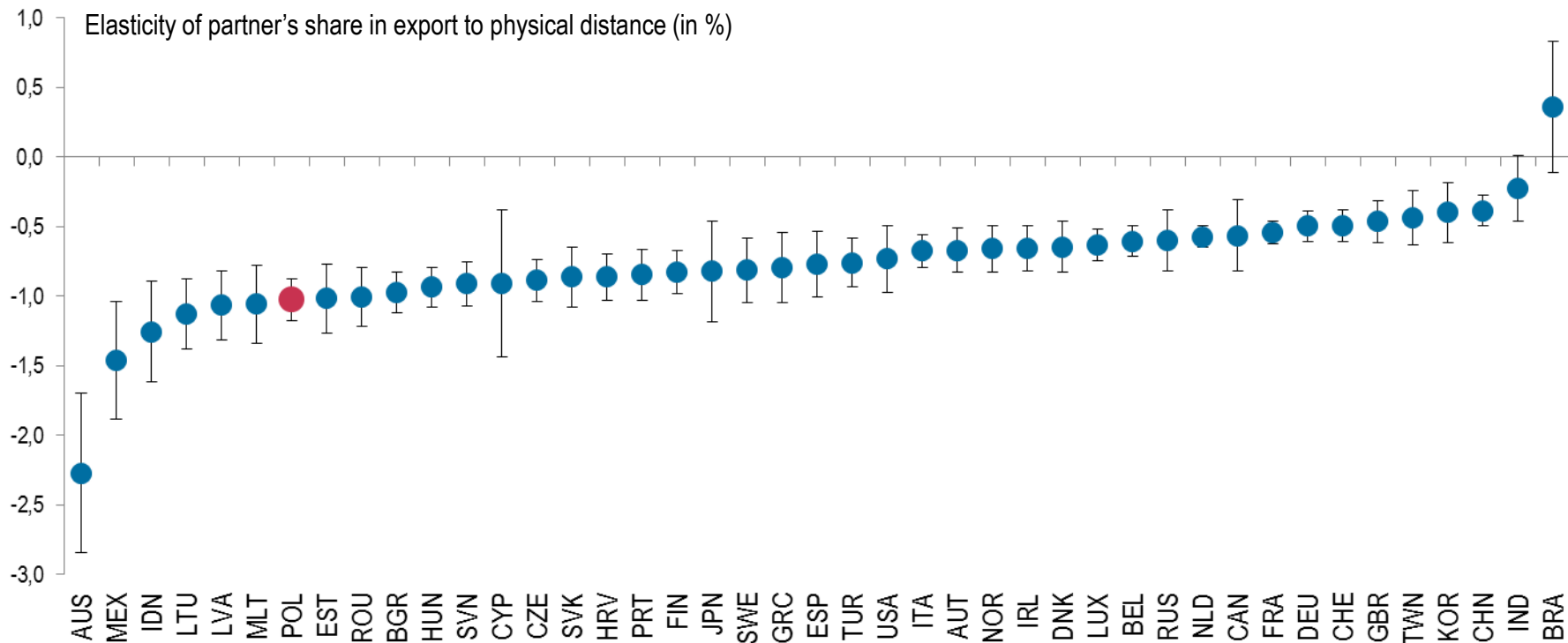


## Growth in the exported value added in CEE driven mainly by final demand in UE15 countries and other emerging economies

Value added growth and its components (y/y, average)



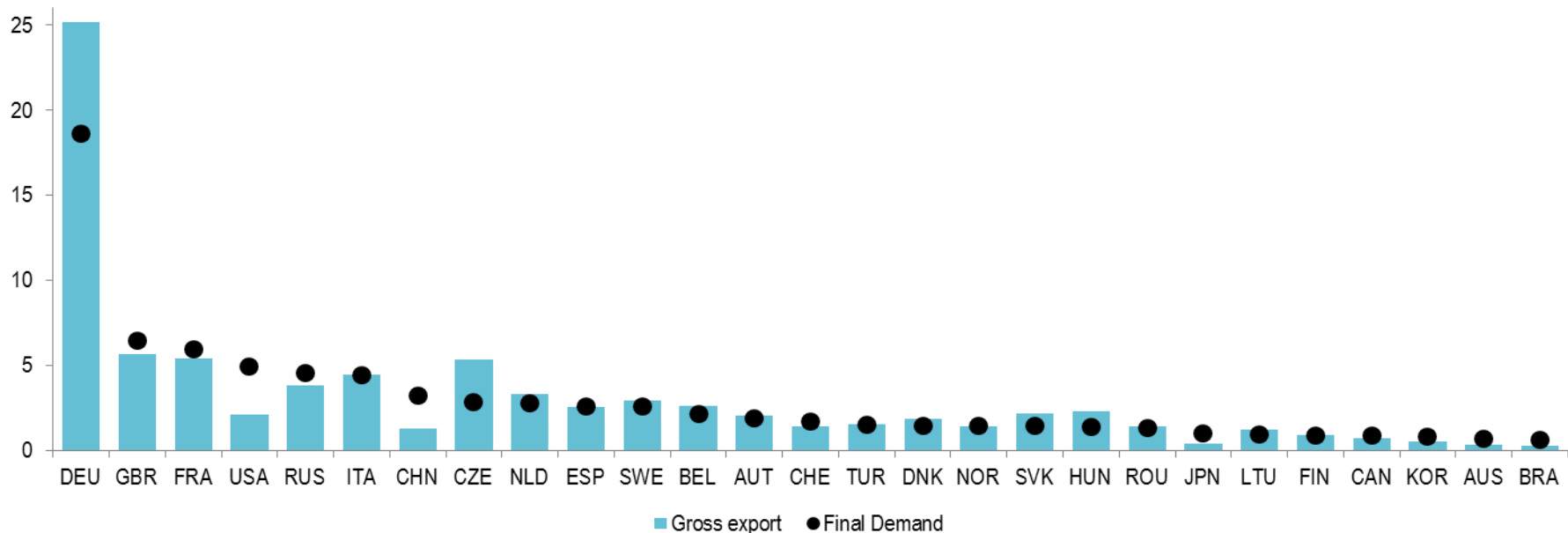
## High elasticity of exports to distance: Focus on local markets and price-cost competitiveness



Source: NBP's calculations based on WIOD and CEPII data.

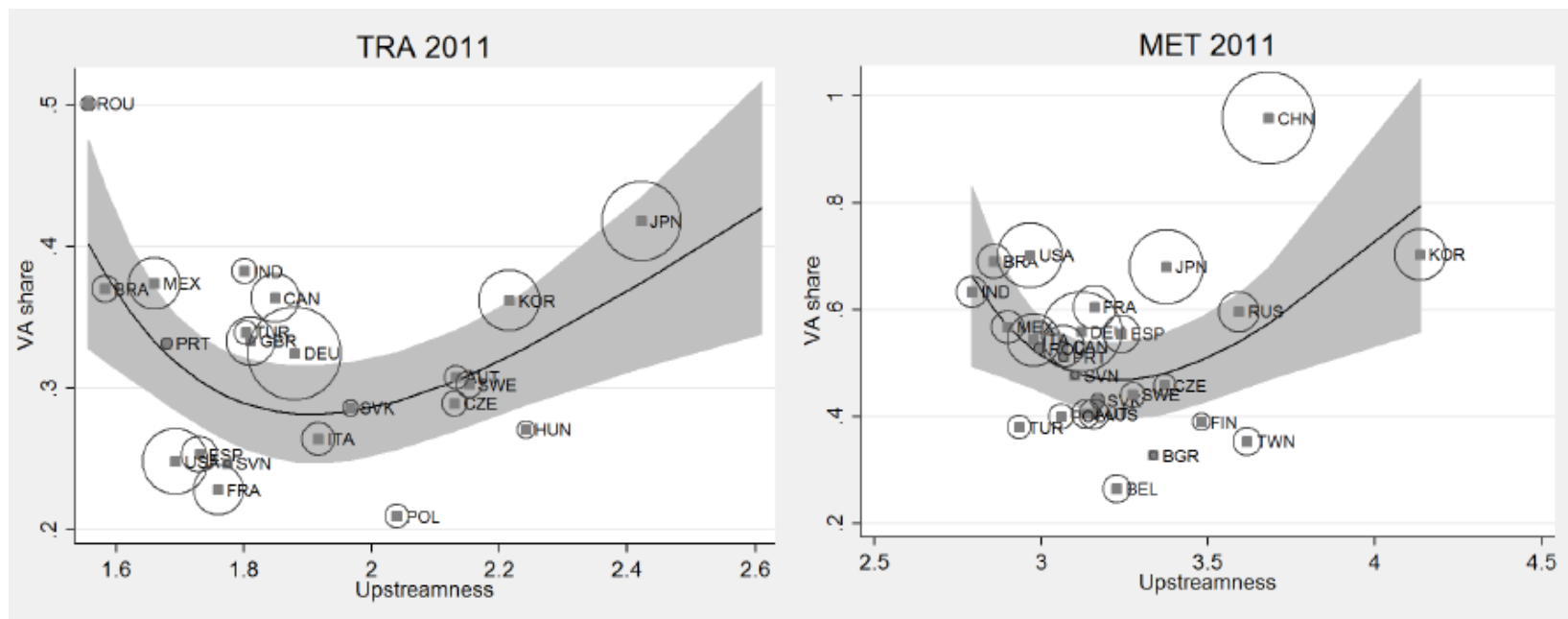
## Possibility of further geographical expansion through GVC

Geographical structure of gross exports and exported value added (in %)



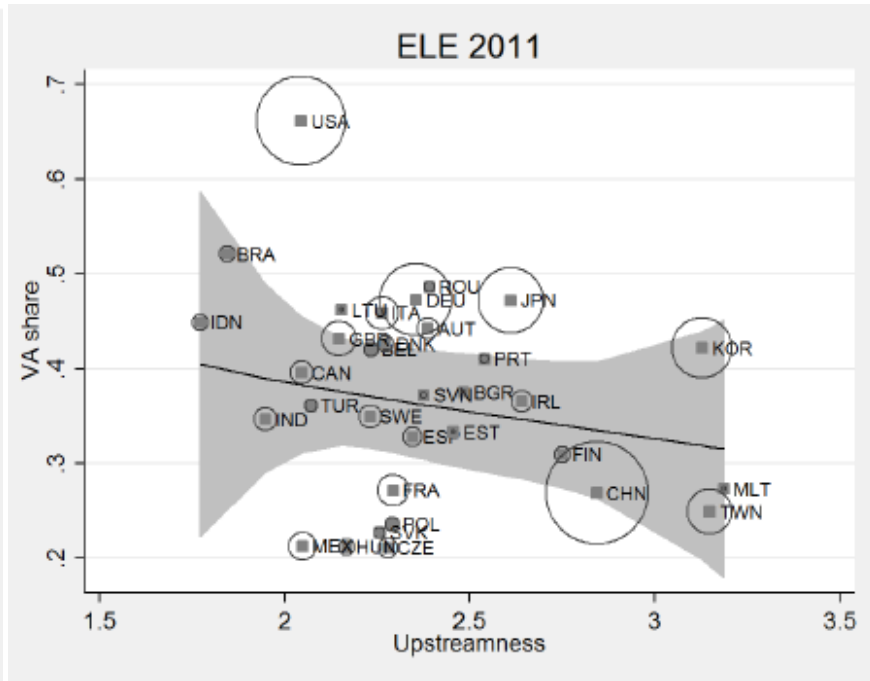
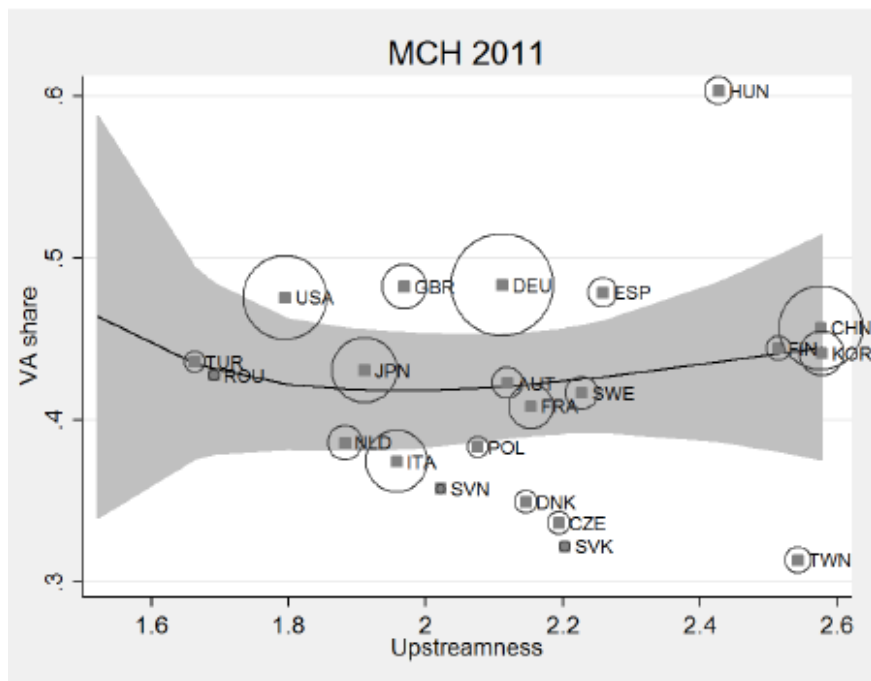
Source: NBP's calculations based on WIOD data.

## Smiling curves: low value added per unit of exports (1) in CEE



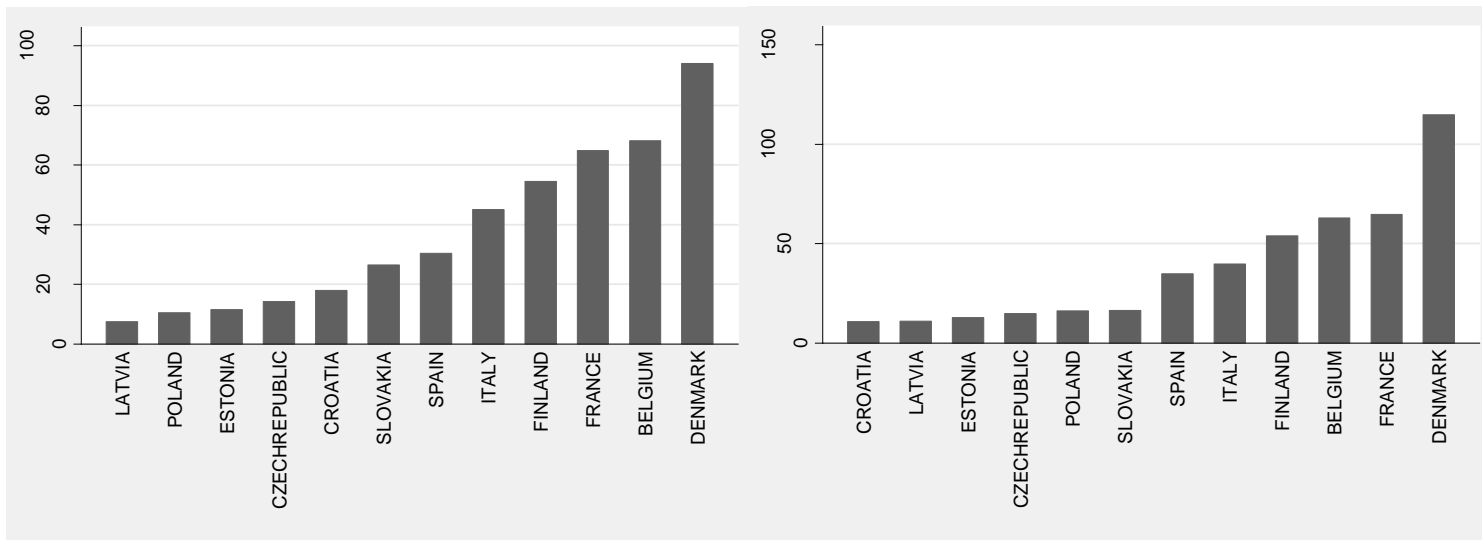
Source: Hagemeyer, 2016.

**Smiling curves: low value added per unit of exports in CEE (2)  
 Attract larger parts of GVC. Improve VA through process innovations.  
 Build own GVCs.**



Source: Hagemejer, 2016.

# Low firm productivity: still room for technology spillovers

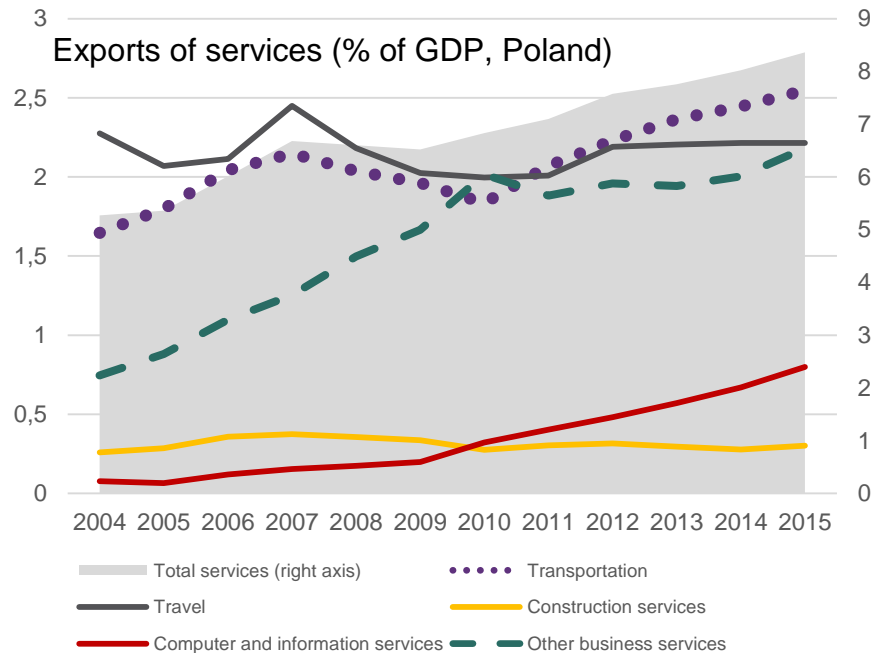
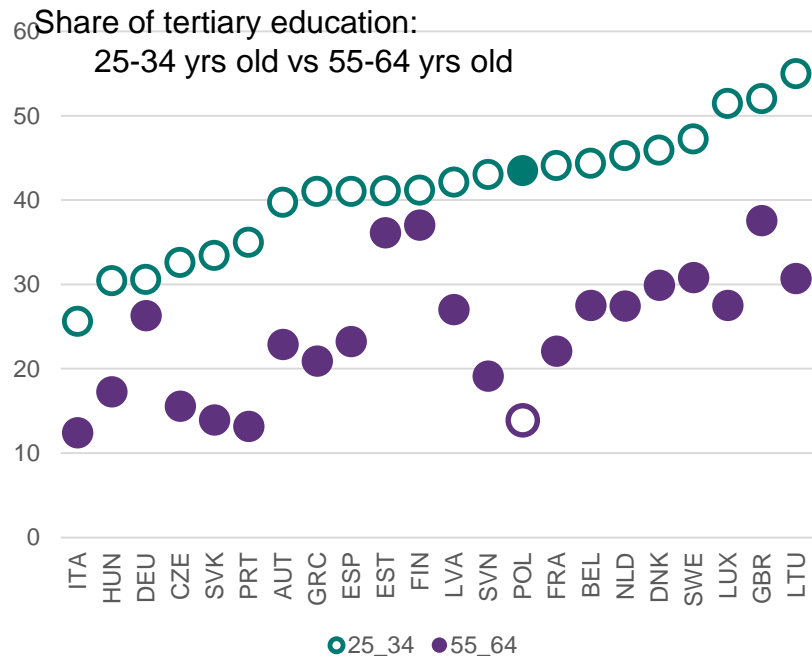


Labor productivity: all non-financial enterprises

Labor productivity: manufacturing

Source: CompNet, simple average of firm level productivity, sample with L>20

# Tremendous progress in educational attainment: comparative advantage in services exports.



Source: OECD

## Other considerations

- Demographics, shrinking labor supply
- Automatisations/robotisations vs routine job content
- Rise of protectionism



*We protect the value of money*