

BAUM conference, Bratislava, 17 October 2019

# Will the Austrians be commuting to Bratislava soon? Bratislava and Vienna - Twin Cities with big Potentials

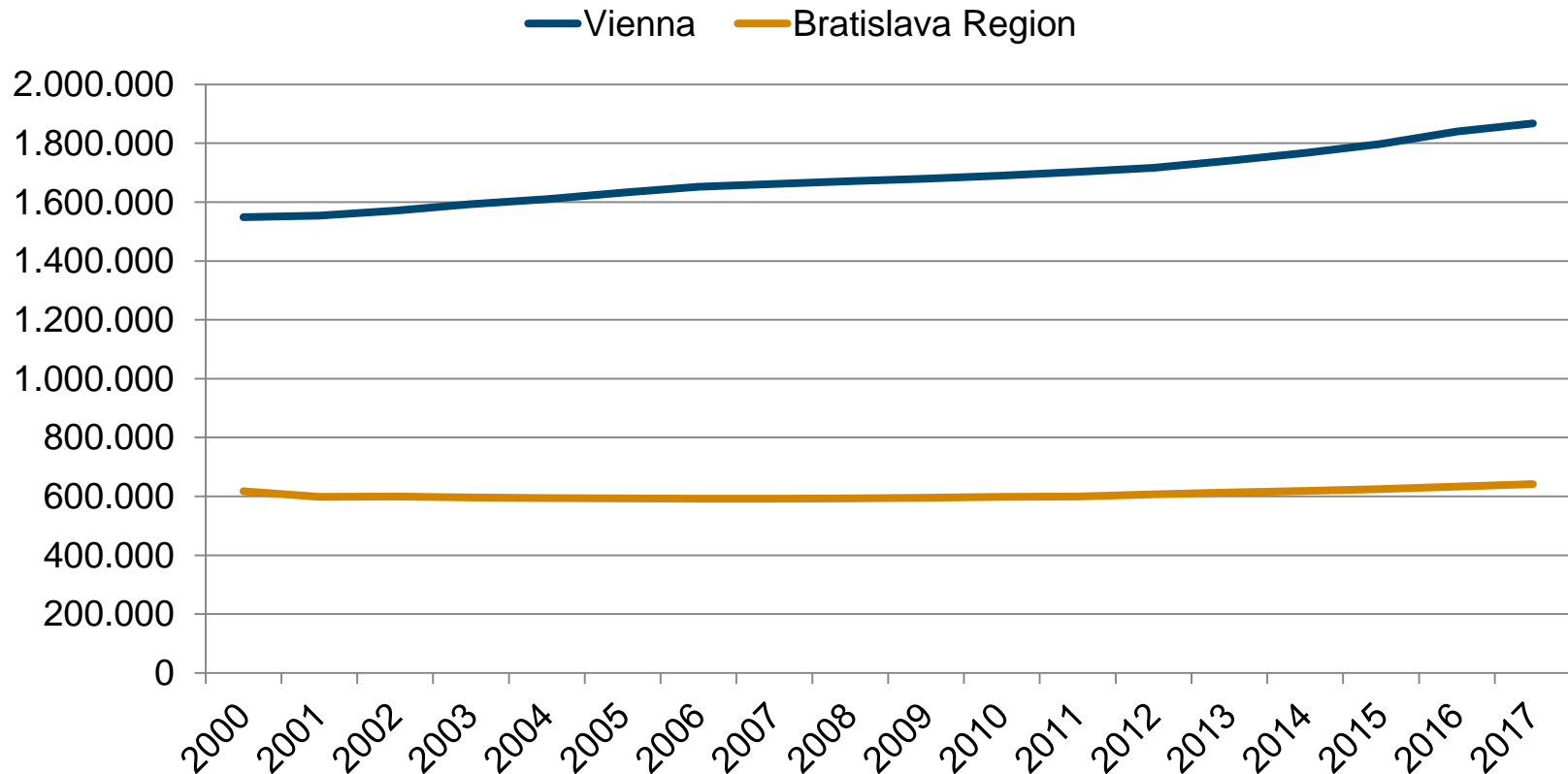
Mario Holzner

 holzner@wiiw.ac.at

 @MarioHolzner

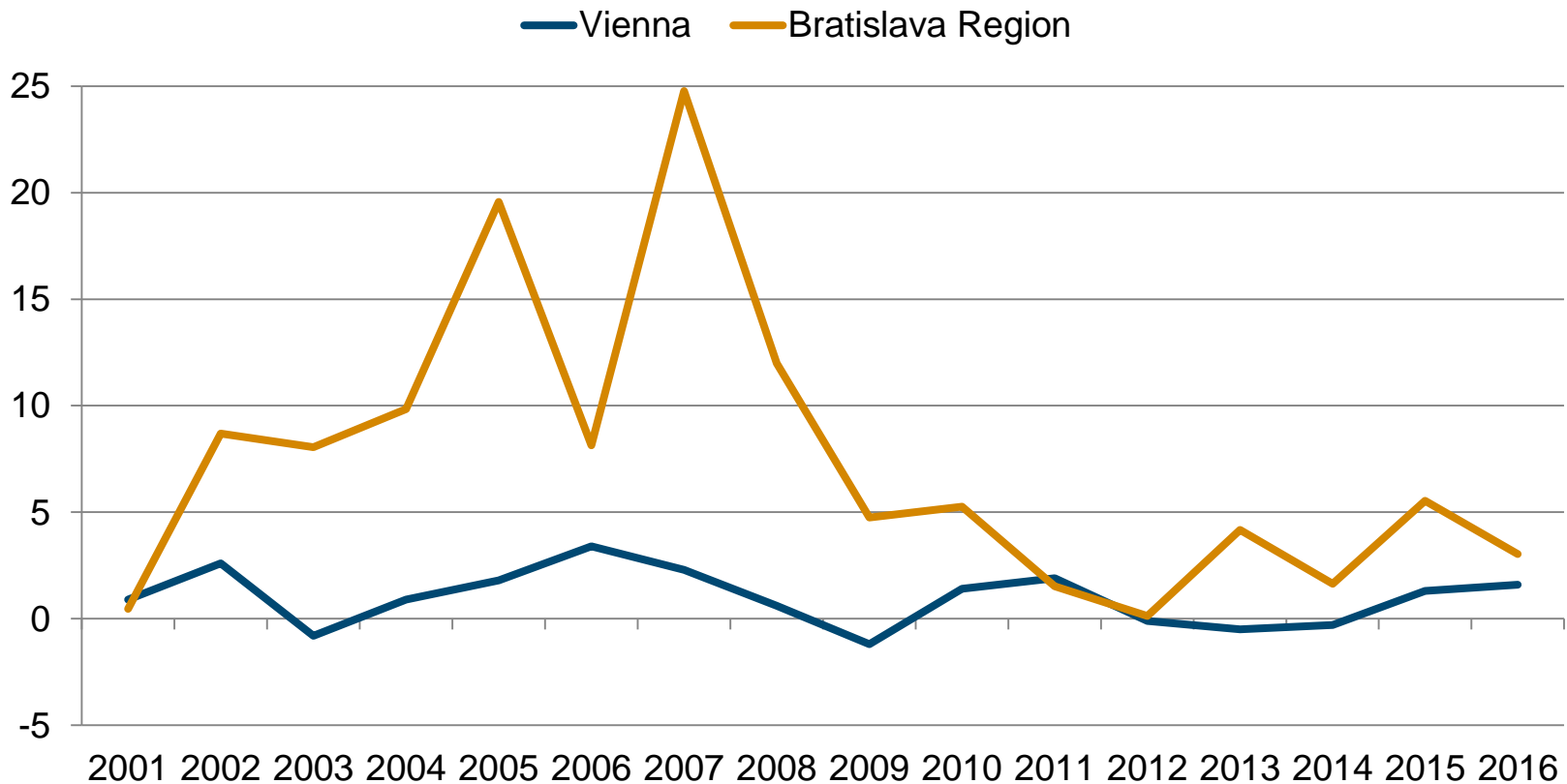
Vienna attracted more persons over the last decades and population grew strongly (while it stagnated in Bratislava)

Population on 1 January, number



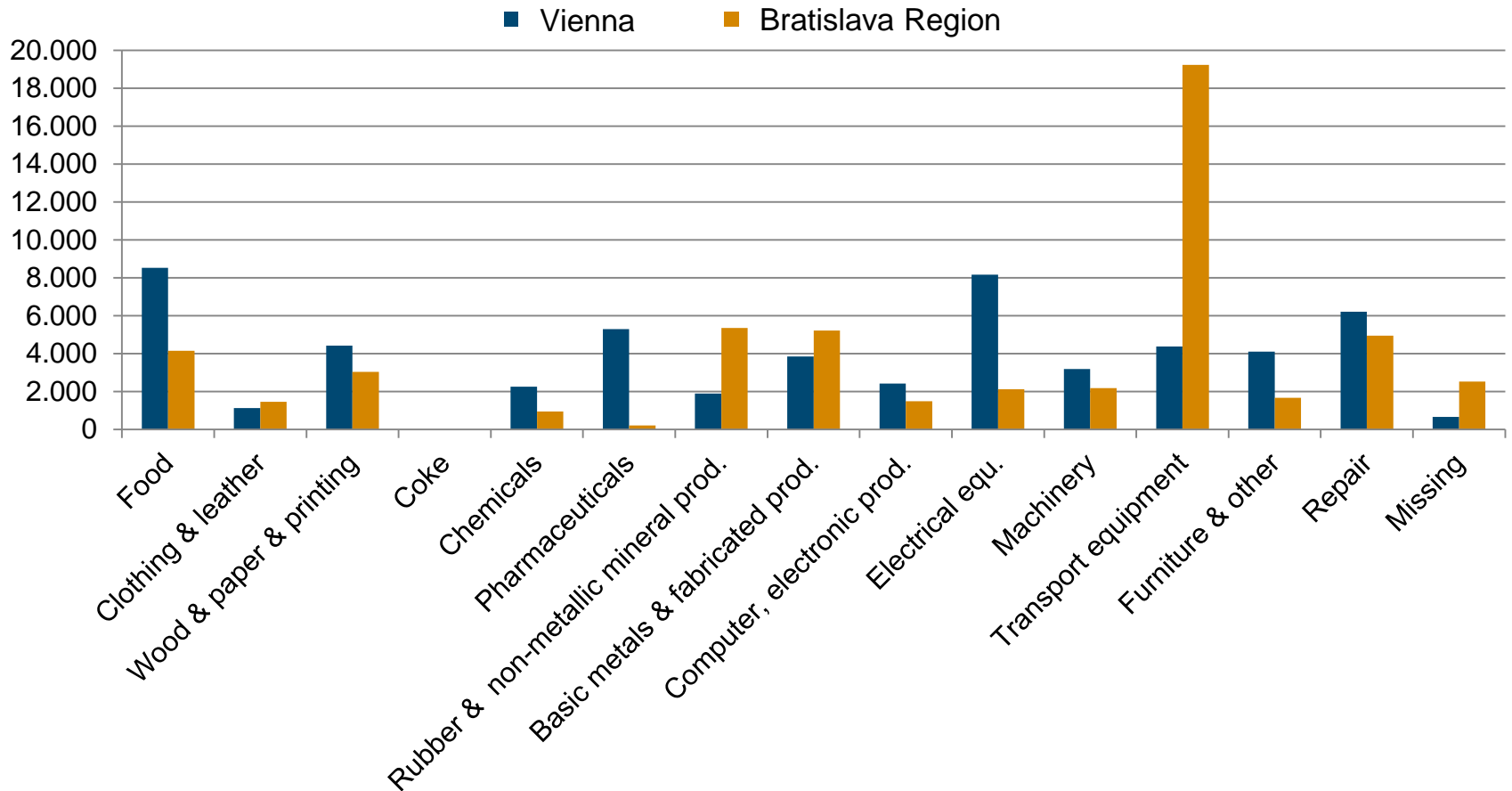
Bratislava experienced strong FDI driven catch-up, high income and full employment (vs Vienna's youth unemployment)

GDP, annual change in %, real



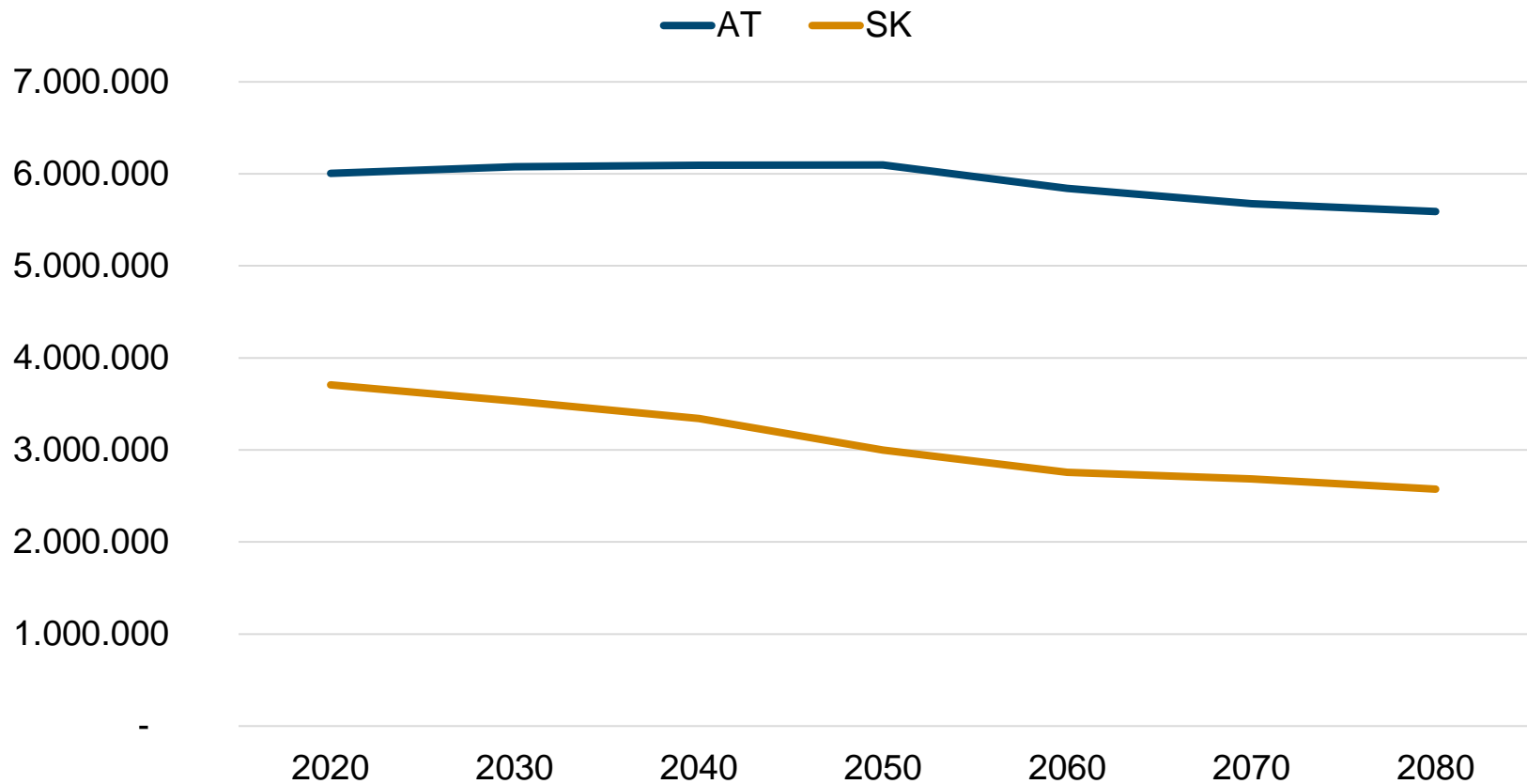
## Vienna specialised in services, Bratislava in (automotive) industry

Number of persons employed in manufacturing, 2016



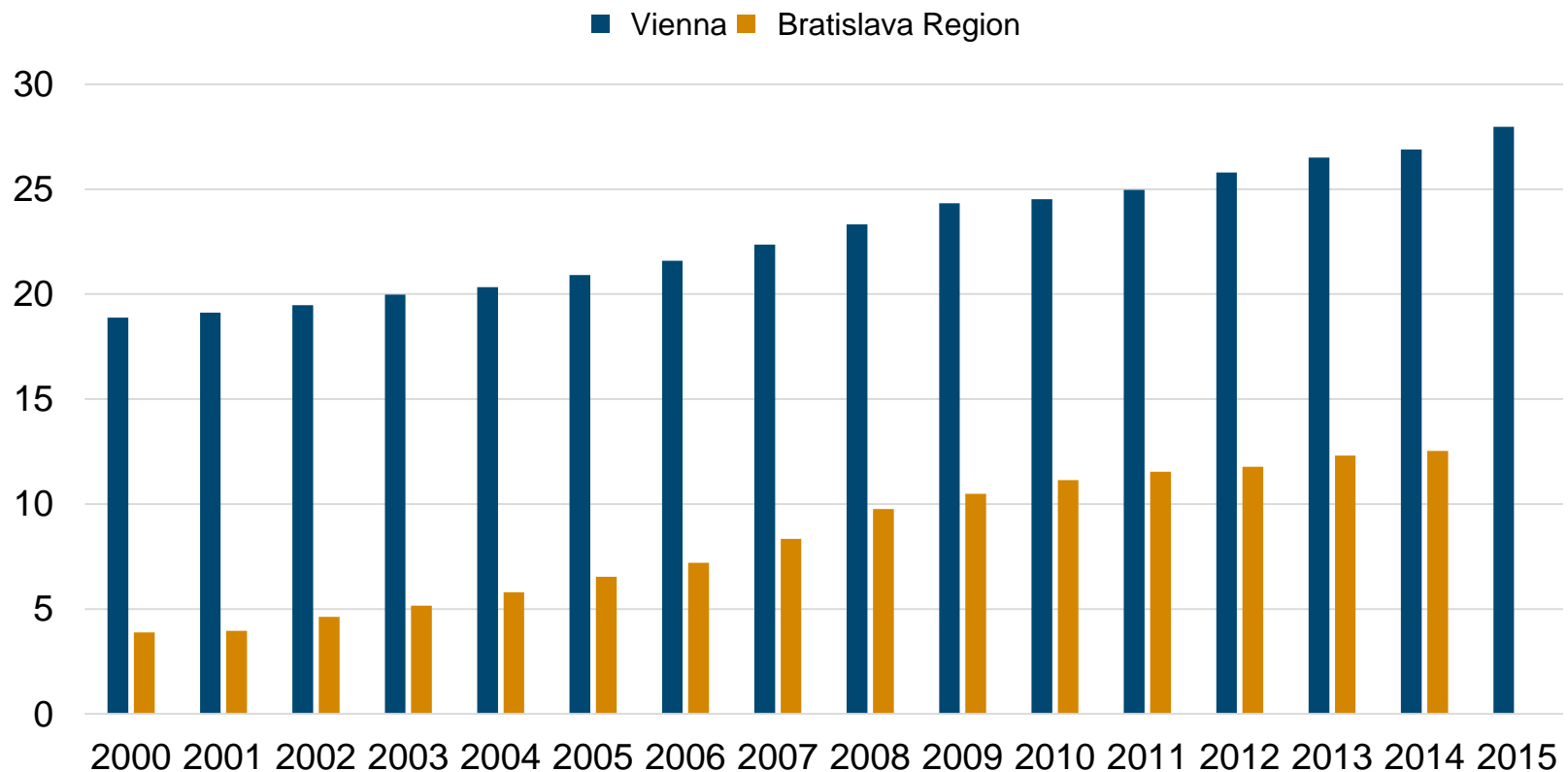
## Demographic challenge: Immigration vs ageing society

Baseline working age population (aged 15-64) projections, 2020-2080



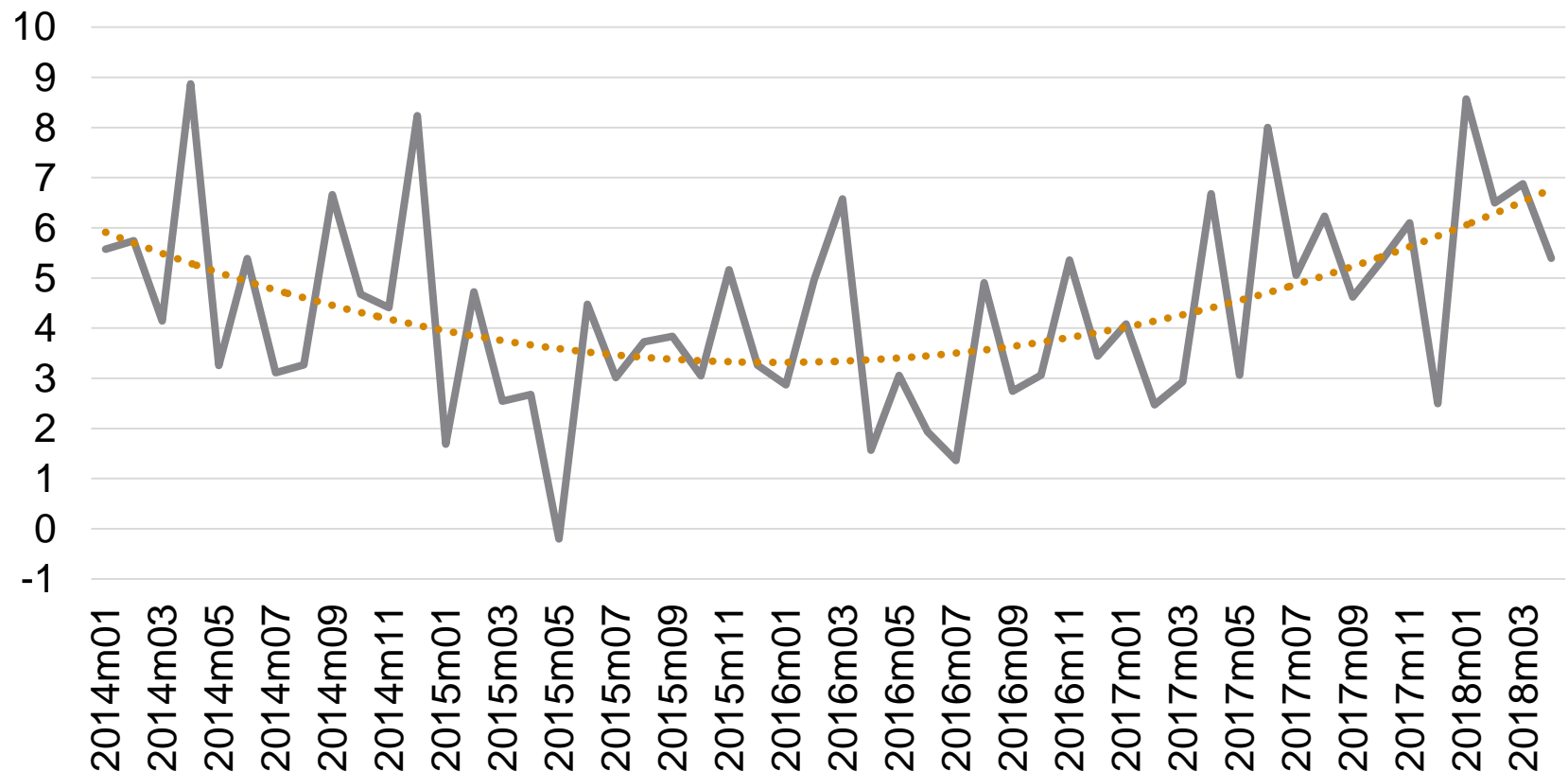
Regional wage convergence proceeding quickly (although at slower pace since outbreak of global financial crisis)

Compensation of employees in EUR per hour worked, 2000-2015



## Most recently Slovak wage growth has again picked up – approaching full employment

Average monthly gross wages in Slovak industry, year-on-year % change

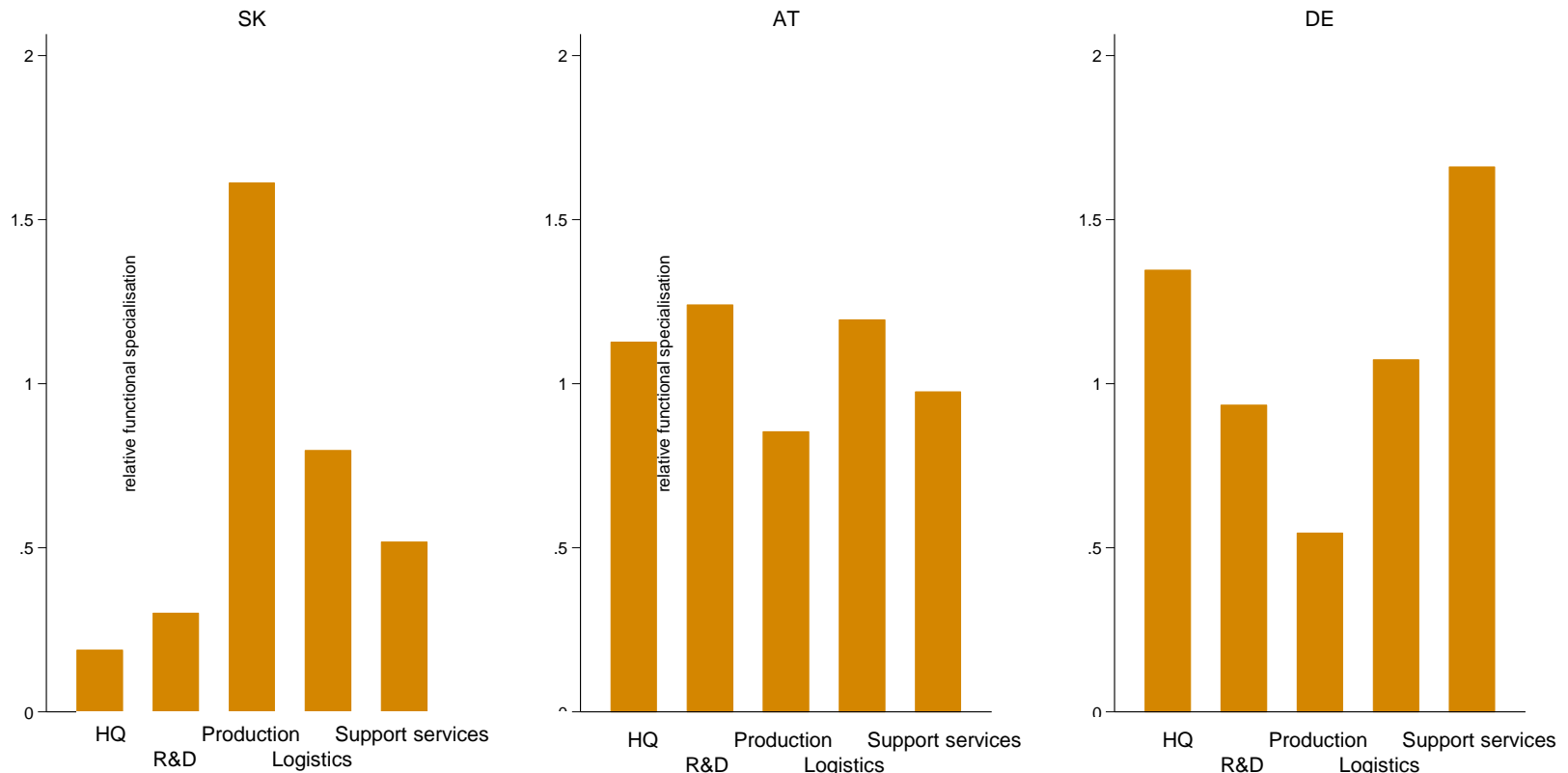


Notes: Dotted line represents the polynomial trend.

Source: wiiw Monthly Database.

# Robotisation challenge: headquarters vs factory economy effects?

Complementarities in relative functional specialisation within the Central European Manufacturing Core (average for the period 2003-2015)



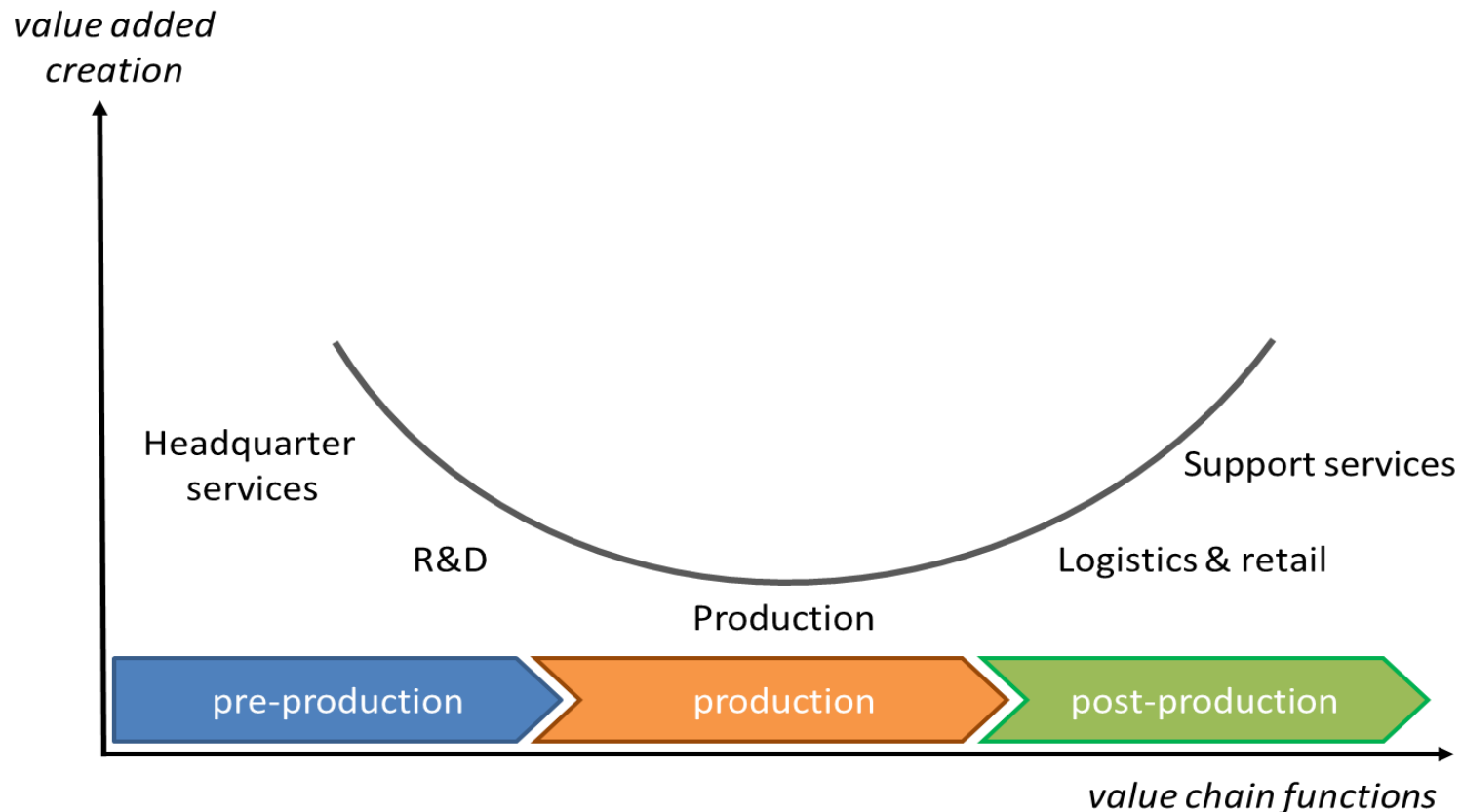
Notes: A relative functional specialisation of above 1 in any value chain function indicates that that particular country is more often used as the location for that value chain function than the world average.

Source: fDi markets database, wiiw calculations.



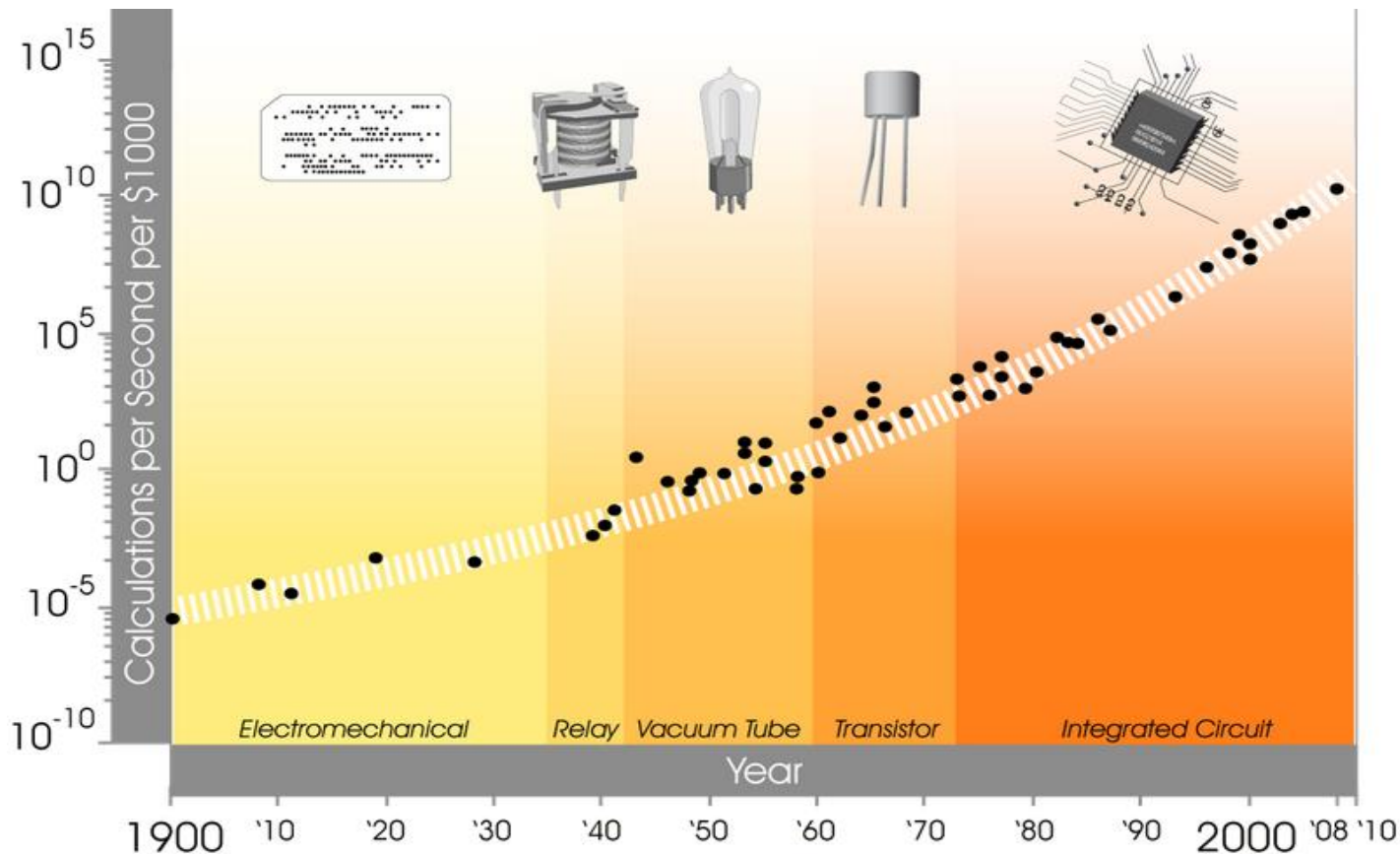
Production activities have lower potential for value creation and might be replaced by robots

The smile curve – value added creation along the value chain



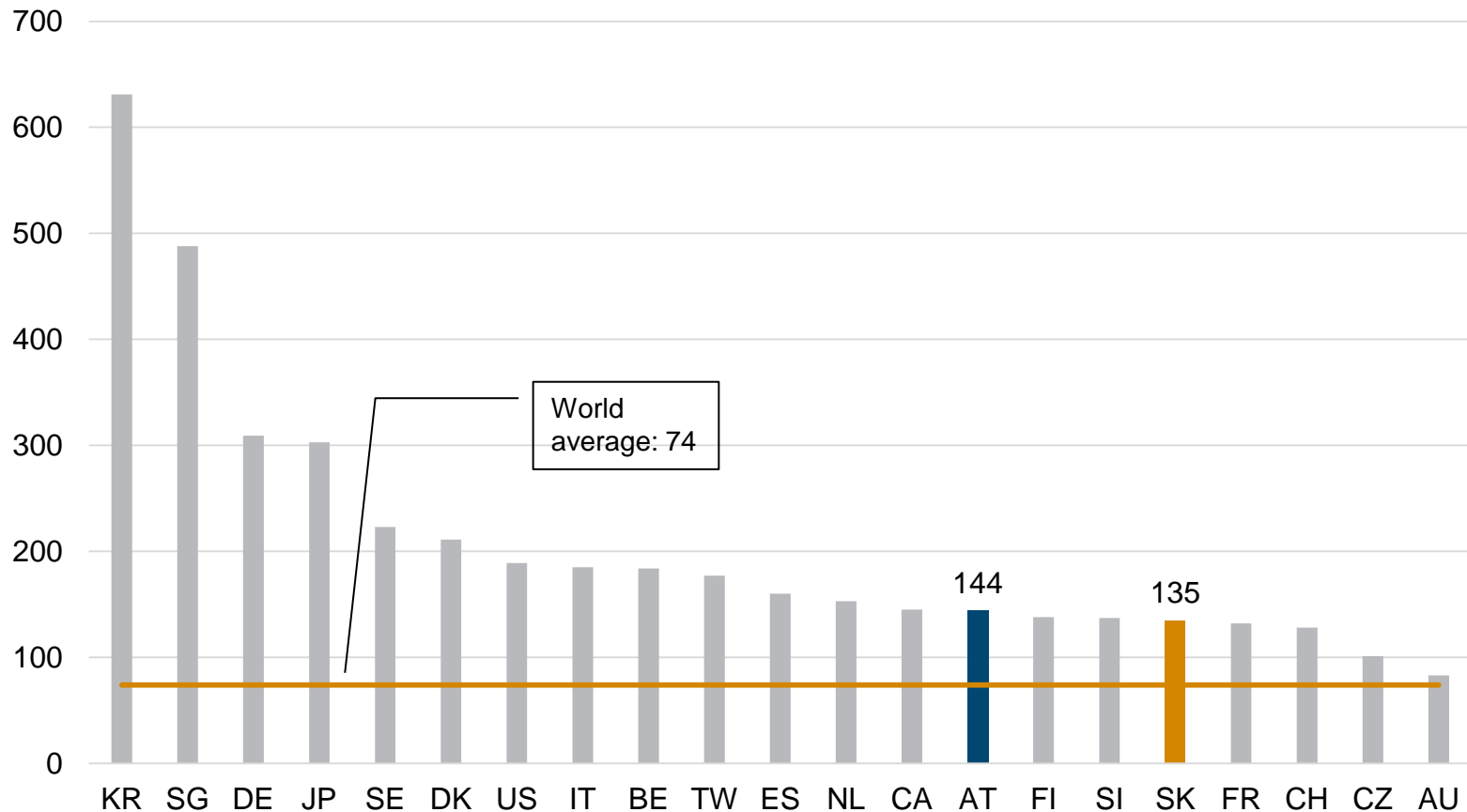
## A gradual 3<sup>rd</sup> and 4<sup>th</sup> Industrial Revolution?

Exponential growth of computing, calculations per second per 1000 USD, logarithmic plot, 1990-2010



## Process of robotisation ongoing, better be part of it!

Number of installed industrial robots per 10,000 employees in the manufacturing industry, 2016



## Policy recommendations

- Medium-term policies to exploit win-win situation of close production & population boom-cities by creating common labour market:
  - Substantial improvement of **inter-city commuter transport**
  - Common **education** planning (language & technical skills)
  - Commuter **allowances** during EUR wage-equalisation-transition
- Long-term policies to cope with digitalisation & robotisation:
  - Projects of **innovation** cooperation (joint research, model factory)
  - Coordination of innovation oriented **public procurement** in cities
  - Improvement of region's **transport infrastructure with the world** to reap potential future gains from increased economies of scale

# Thank you for your attention!

Follow us:

[www.wiiw.ac.at](http://www.wiiw.ac.at)

