

## HOW CAN PRODUCTIVITY GAINS BE SHARED AND INCLUSIVE ACROSS SPACE

Global Productivity Forum, Budapest

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### Productivity

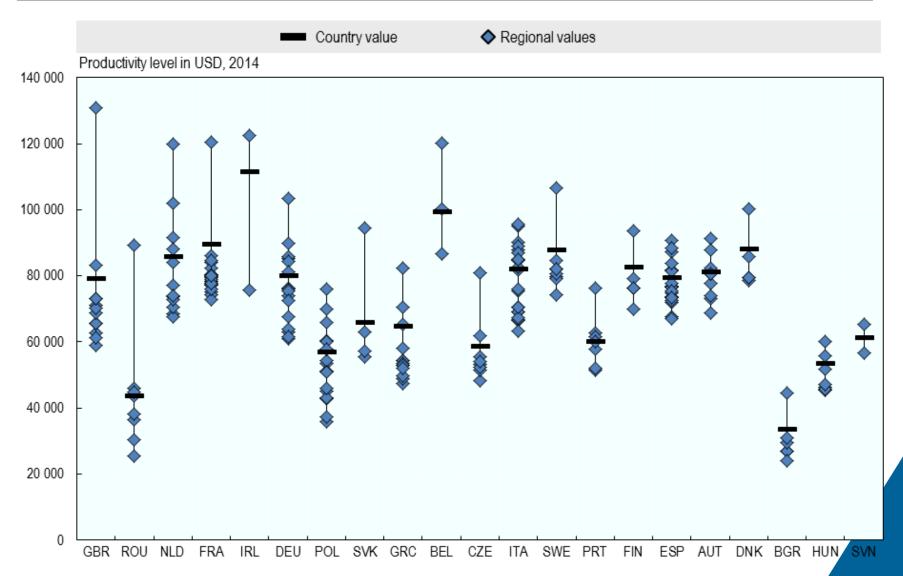
- Productivity across regions and cities
- Productivity performance / catching up
- Drivers of catching-up
- Territorial aspects of, and strategies for developing the tradable sector
- Inclusiveness
  - Inclusiveness in regions and cities
  - Productivity-inclusiveness nexus across space
- Conclusion: Trade / GVC integration



## Productivity across regions and cities

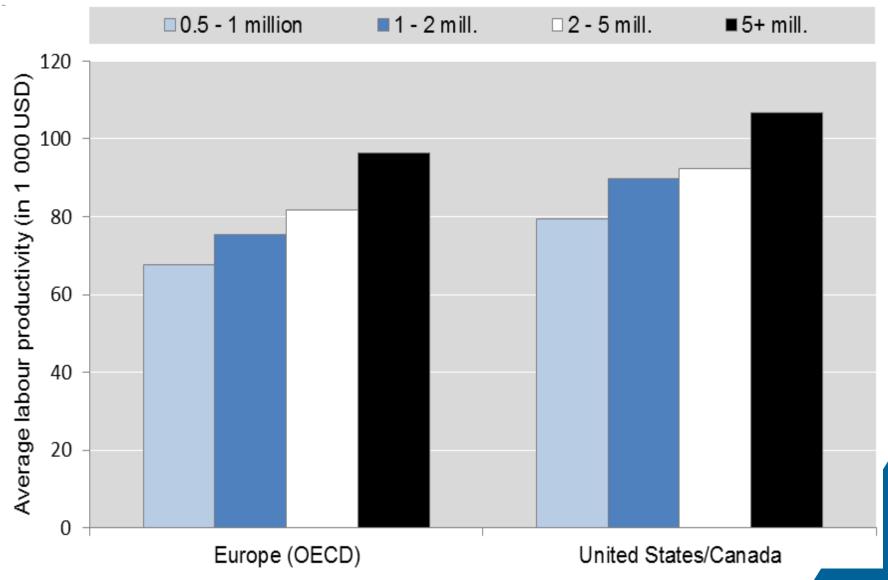


### Productivity differs widely within countries



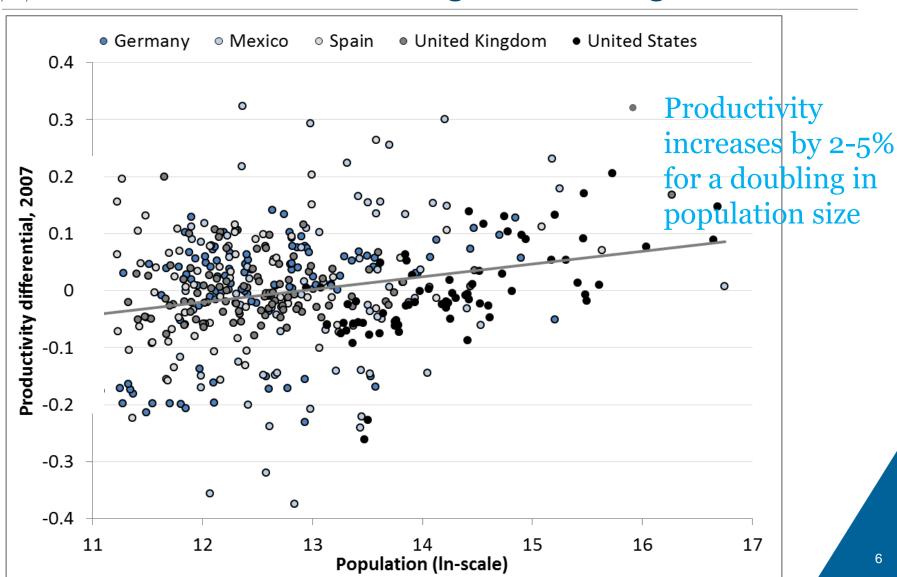


### Bigger cities are more productive



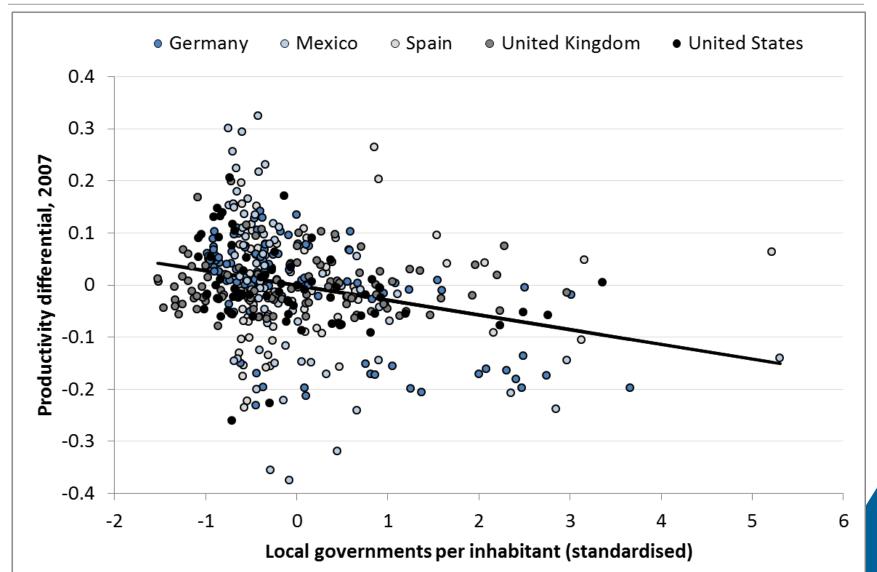


### City productivity increases with city size even after controlling for sorting





# Administrative fragmentation is correlated with lower city productivity

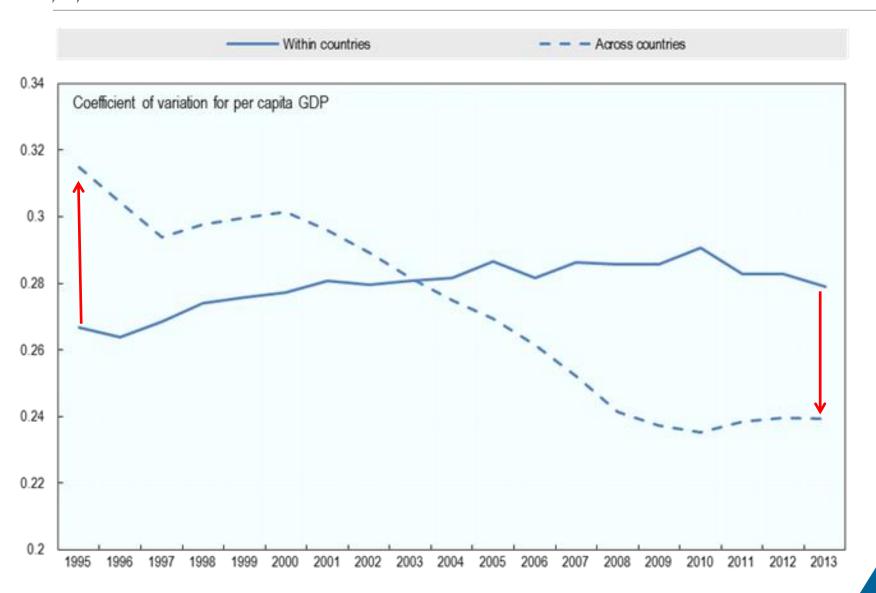




# Productivity Performance / Catching up

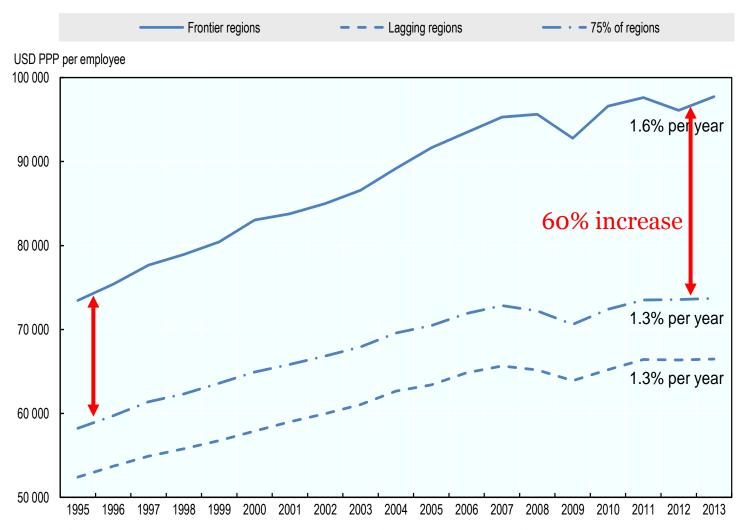


# OECD economies have converged - Within countries, regions have diverged



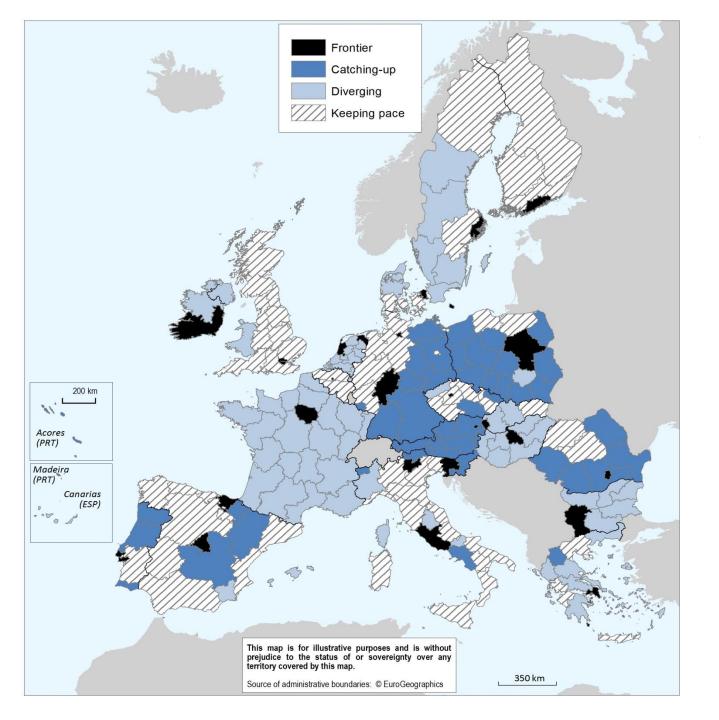


# The productivity gap between frontier and lagging regions has increased



Averages of top 10% (frontier), bottom 75%, and bottom 10% (lagging) regional GDP per worker, TL2 regions

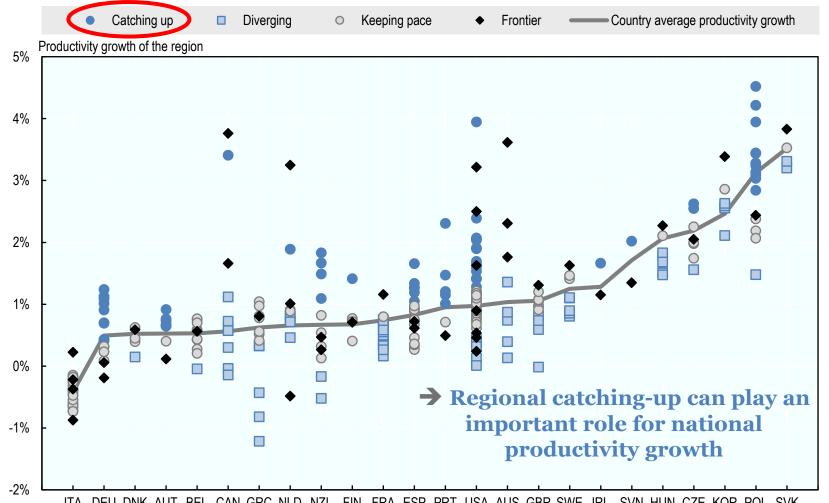
Notes: Average of top 10% and bottom 10% TL2 regions, selected for each year. Top and bottom regions are the aggregation of regions with the highest and lowest GDP per worker and representing 10% of national employment. 19 countries with data included.



Geography of productivity convergence relative to national frontiers in European regions



## National labour productivity growth depends on the performance of regions



ITA DEU DNK AUT BEL CAN GRC NLD NZL FIN FRA ESP PRT USA AUS GBR SWE IRL SVN HUN CZE KOR POL SVK Annual average growth in real per worker GDP between 2000-2013 (or closest year available).



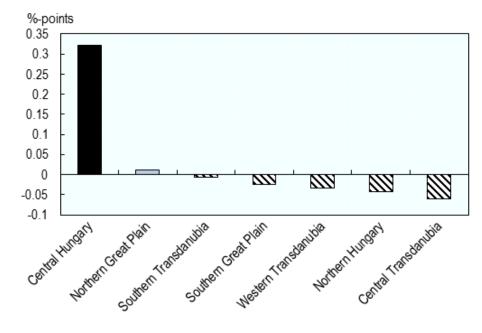
## Productivity and "catching up" in Hungary

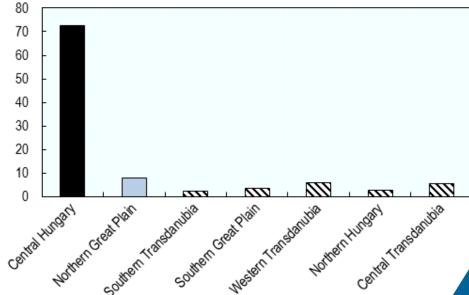


%

Contribution to national labour productivity growth, 2000-12

Percentage contribution to national GDP growth, 2000-2012





Note: Difference between national labour productivity growth as calculated with and without the indicated region.

Note: The contribution is the product of a region's GDP growth rate by its initial share of GDP.

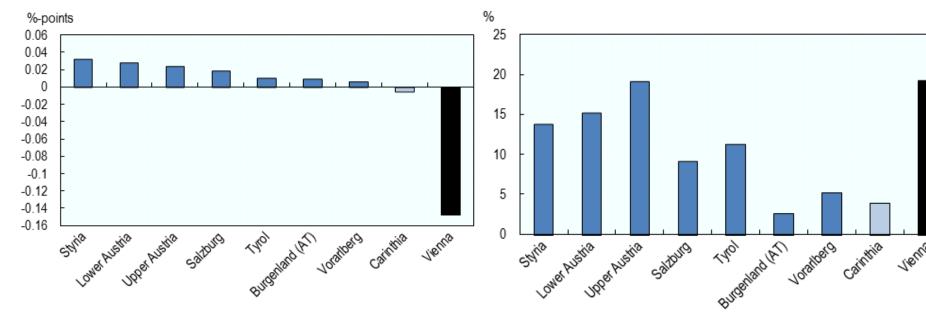


### Productivity and "catching up" in Austria



Contribution to national labour productivity growth, 2000-13

Percentage contribution to national GDP growth, 2000-2013



Note: Difference between national labour productivity growth as calculated with and without the indicated region.

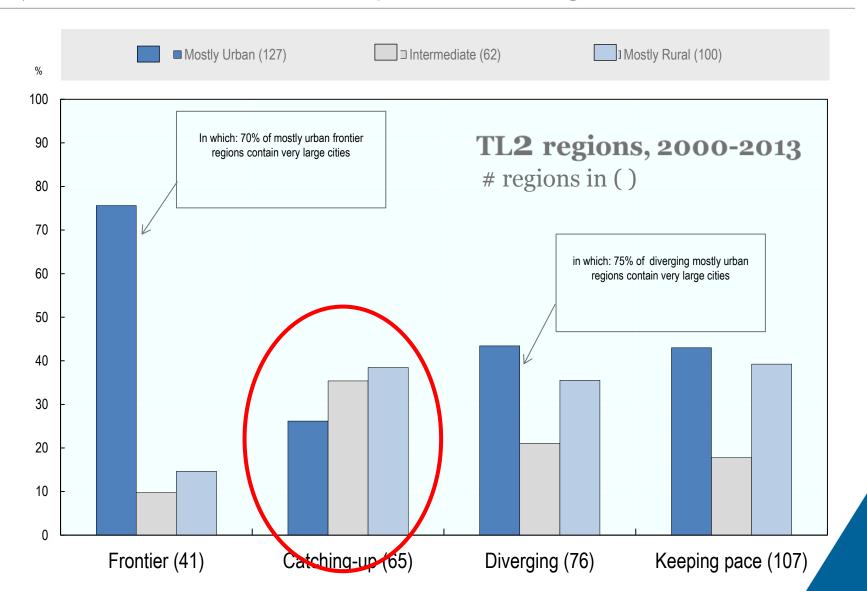
Note: The contribution is the product of a region's GDP growth rate by its initial share of GDP.



# The drivers of regional productivity catching-up

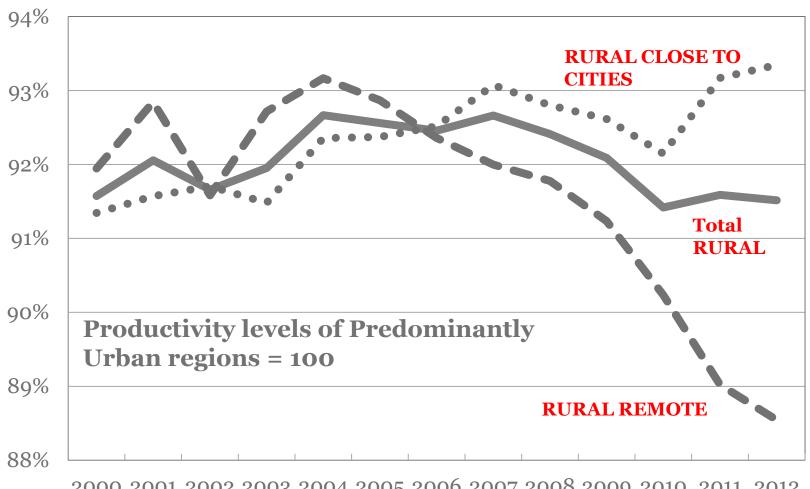


# Good or bad productivity performance can be found for all types of regions





### Labour productivity of remote rural areas has recently declined

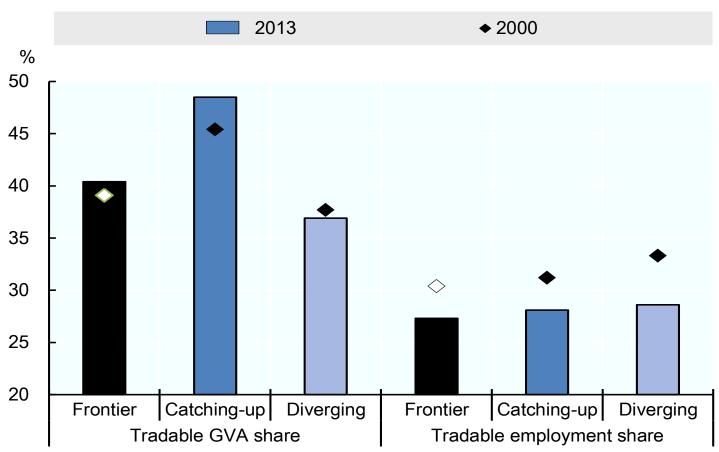


2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012



# Stronger intensity of tradable sectors is associated with productivity catching-up

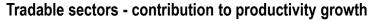
#### All tradable sectors, TL2 regions

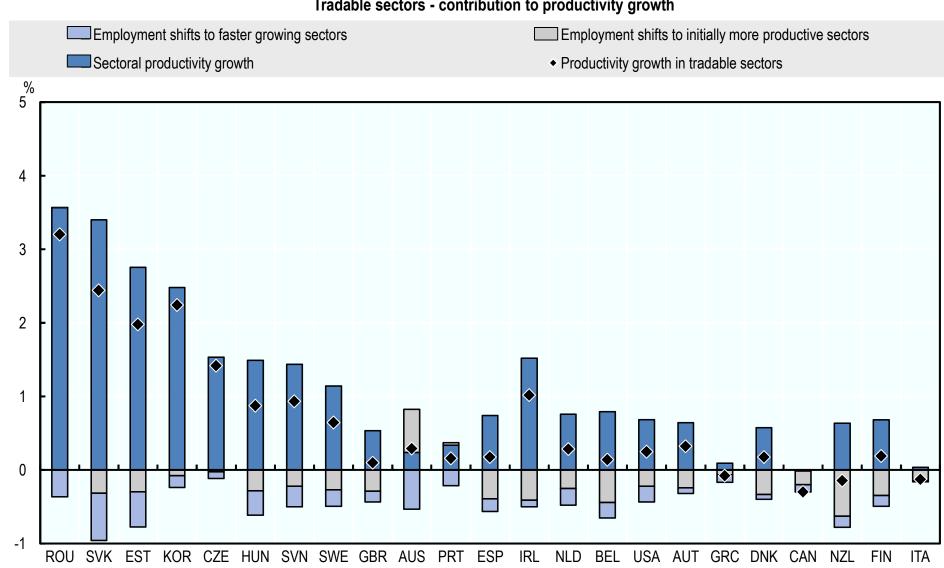


Notes: Tradable sectors are defined by a selection of the 10 industries defined in the SNA 2008. They include: agriculture (A), industry (BCDE), information and communication (J), financial and insurance activities (K), and other services (R to U). Non tradable sectors are composed of construction, distributive trade, repairs, transport, accommodation, food services activities (GHI), real estate activities (L), business services (MN), and public administration (OPQ).



### Productivity gains in tradables are mainly within sectors

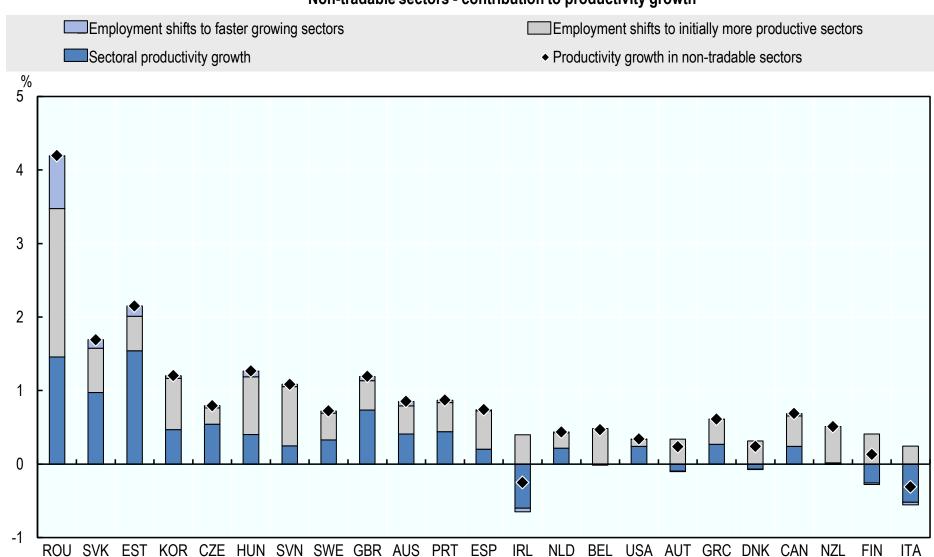






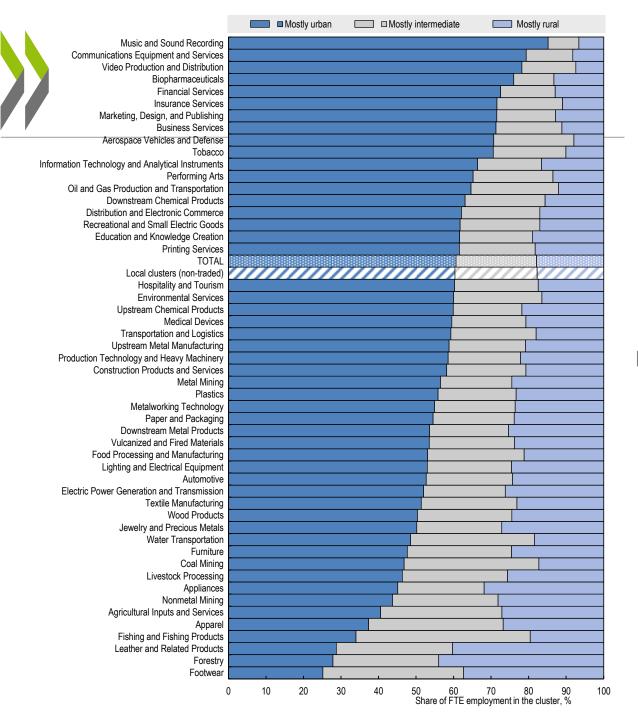
# Productivity gains in non tradables are associated with sectoral shifts







# Territorial aspects of, and strategies for developing the tradable sector



# Share of total employment in clusters by type of TL2 region

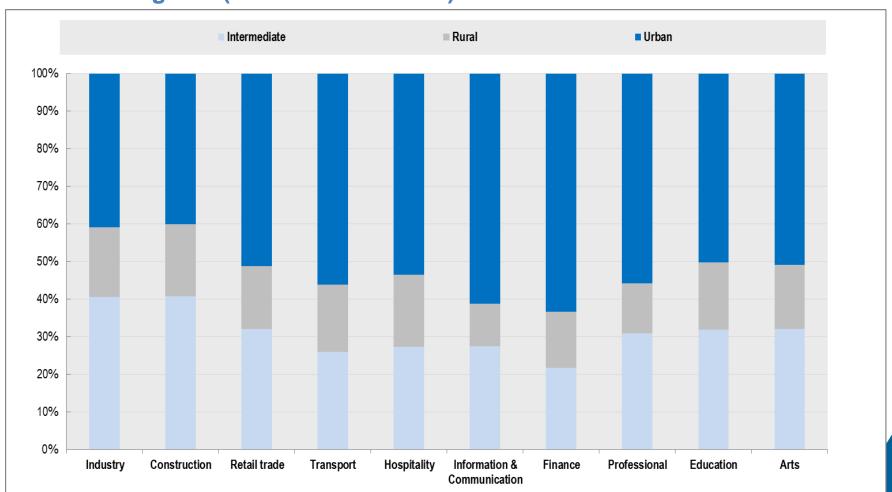
Mostly urban regions are those with at least 70% of its population living in Functional Urban Areas or part of its population living in a large metro area with at least 1.5 million inhabitants. Mostly rural regions have less than 50% of their population living in FUAs

Source: OECD Regional Statistics and Ketels and Protsiv (2016)



### Urban areas attract more knowledgeintensive firms

Birth shares by sector (births by sector/total regional births) TL3 regions (15 OECD countries) 2014





## Strategies for developing the tradable sector

To remain competitive in Tradable sectors there are mainly three main options:

- Continued specialisation in *Natural resources*. This is typically an option for remote rural regions
- 2. Be integrated in *Global Value Chains*. Integration between manufacturing and service sectors is needed. Connectivity and proximity may favour low-density areas close to cities. Without a territorial strategy it may be difficult to benefit from GVCs for regional development. Forward and backward linkages (*re-bundling*) are critical to maximize value-added of FDI and creation of a network of local suppliers.
- 3. Develop *Territorially differentiated products* & *services* through mobilisation of local assets. Consumers may express preferences for local or traceable products, without subsidies or some form of protection.

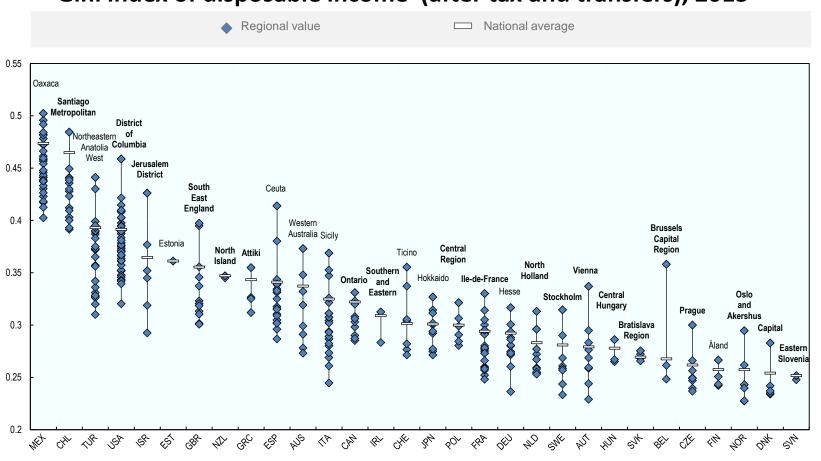


## Inclusiveness in regions and cities



# Disparities of household income are large within regions, mainly in capital cities

#### Gini index of disposable income (after tax and transfers), 2013

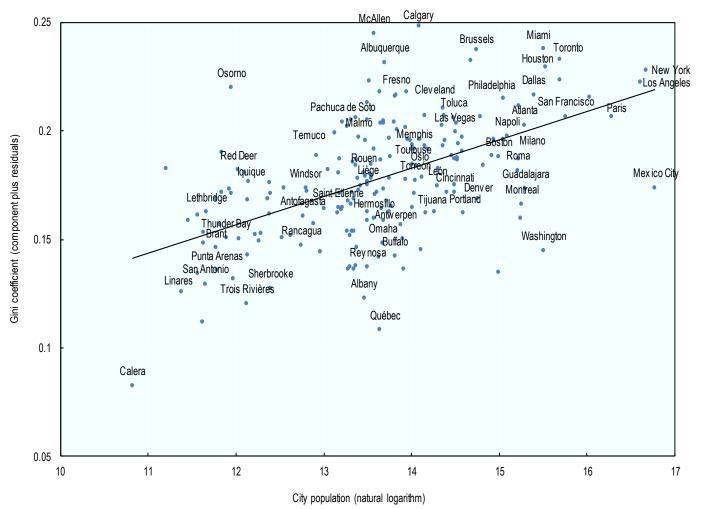




### Larger cities are more unequal

#### Metropolitan population and income inequality, circa 2014

Metropolitan size and inequality, once controlled for income levels and country effect





# What do we know about the nexus between productivity and inclusiveness across space



### Towards a topology for regions and cities\*

Highly productive / Not Inclusive

Highly productive & Inclusive

Neither productive nor inclusive

Not productive / Highly inclusive

<sup>\*</sup>This section is based on preliminary work that has been prepared by the Program for Local Economic and Employment Development (LEED) and discussed by its Committee



# Designing the Inclusiveness Composite Indicator (Work in Progress)

Variables	Weight
Unemployment	Equal weighting was selected after PCA assigned similar weights to all indicators
Long-term unemployment	
Low-work intensity household	
Deprivation rate	
Poverty rate	
NEET rate	
Educational attainment: primary education	



## Designing the Inclusiveness Composite Indicator

### What it does

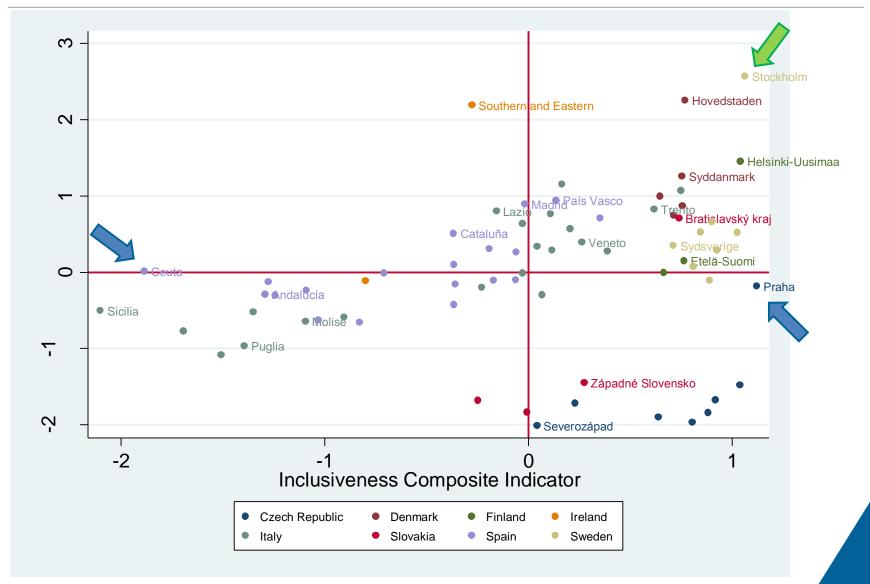
- Reduce the data from a multidimensional frame to a single dimension, simplifying its interpretation
- Concentrate on the inclusion of the most disadvantaged individuals in society
- Provide a way to measure
   regional differences within the
   same country and across
   countries

### What it does not do

- Provide a measure of income inequality
- Act as an indicator of overall well-being
- Include data on access to basic services (future development)



## Comparing 70 regions across 8 OECD countries



# Conclusion: Can integration into global trade (and into GVCs) further spatial inclusiveness?

- Following the evidence presented by the other panellists, integration of regions and cities into global value chains improves various inclusiveness outcomes for them, improving inclusiveness within territories
- This is coherent with the evidence that by and large productivity and inclusiveness seem to be correlated across space
- However, it is typically cities and regions sufficiently close to larger urban centers that get integrated into GVCs, given the obvious importance of good transport links
- For remote (rural) regions such an integration is more difficult, implying that the emergence of GVCs may have contributed to widen spatial gaps between territories



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### THANK YOU

