STRATEGIES TO STIMULATE PRODUCTIVITY
IN LOW-DENSITY REGIONS

SEMINAR GLOBALIZATION & TERRITORIES

CASA MATEUS  25-27 NOV 2016

Joaquim Oliveira Martins
Regional Development Policy Division, OECD
National productivity performance needs the contribution of all regions
Convergence of countries vs. divergence of regions in the OECD

GDP per capita dispersion is now greater *within* countries than *between* countries.
A growing productivity gap between the frontier and other 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.
Where are located the Frontier, Catching-up and Diverging regions?

- Frontier (41)
- Catching-up (65)
- Keeping pace (107)
- Diverging (76)

70% of mostly urban frontier regions contain very large cities.

75% of diverging mostly urban regions contain very large cities.

TL2 regions, 2000-2013
How national labour productivity growth depends on the performance of regions?

Regional catching-up can play an important role for national productivity growth.

Annual average growth in real per worker GDP between 2000-2013 (or closest year available).
## Contribution of the different regional productivity patterns to OECD growth

<table>
<thead>
<tr>
<th>Type of regions</th>
<th>Employment share in 2000</th>
<th>GDP share in 2000</th>
<th>Annual avg. GDP growth, 2000-13</th>
<th>GDP growth contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frontier</td>
<td>16.1%</td>
<td>20.1%</td>
<td>1.7%</td>
<td>21.9%</td>
</tr>
<tr>
<td>Catching up</td>
<td>20.3%</td>
<td>18.2%</td>
<td>2.2%</td>
<td>25.3%</td>
</tr>
<tr>
<td>Keeping pace</td>
<td>38.9%</td>
<td>39.1%</td>
<td>1.3%</td>
<td>30.4%</td>
</tr>
<tr>
<td>Diverging</td>
<td>24.6%</td>
<td>22.6%</td>
<td>1.6%</td>
<td>22.4%</td>
</tr>
<tr>
<td>OECD average</td>
<td></td>
<td></td>
<td>1.6%</td>
<td></td>
</tr>
</tbody>
</table>

Note: Frontier regions are fixed for the 2000-13 period. In four countries the values for 2000 or 2013 were extrapolated from growth rates over a shorter time period as data for 2000 or 2013 were not available. The countries are FIN (2000-12), HUN (2000-12), NLD (2001-13) and KOR (2004-13).
How different regions contribute to OECD wide growth?

Contribution of regions to OECD growth (growth*size), 1995-2007

Few large hubs vs. a large number of much smaller regions (there is no average region or city!)

32% of growth

68% of growth

Regions in declining order of growth contribution
What are the main drivers of regional productivity catching-up?
Proximity to cities benefits surrounding rural & intermediate regions

Economic growth increases with nearness to large cities
Yearly growth rates of GDP per head (1995-2010) and driving time to the closest large metropolitan area of 2 million or more inhabitants in OECD countries

- Economic growth:
  - 1.88%
  - 1.31%
  - 1.19%
  - 1%
  - More than 300 minutes (MN): 0.87%

StatLink: http://dx.doi.org/10.1787/888933106667
Rural remote regions present a higher variation in productivity growth rates than other types of regions

<table>
<thead>
<tr>
<th>Type of Region</th>
<th>Annual average labour productivity growth, 2000-12</th>
<th>Standard deviation</th>
<th>Coefficient of variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predominantly urban</td>
<td>1.01%</td>
<td>1.02%</td>
<td>1.019</td>
</tr>
<tr>
<td>Intermediate</td>
<td>1.07%</td>
<td>1.09%</td>
<td>1.024</td>
</tr>
<tr>
<td>Predominantly rural close to cities</td>
<td>1.36%</td>
<td>1.32%</td>
<td>0.972</td>
</tr>
<tr>
<td>Predominantly rural remote</td>
<td>0.70%</td>
<td>1.15%</td>
<td>1.641</td>
</tr>
</tbody>
</table>

Note: Labour productivity is defined as real GDP per employee. GDP is measured at PPP constant 2010 US Dollars, using SNA2008 classification; employment is measured at place of work. The coefficient of variation represents the ratio of the standard deviation over the mean.

Source: OECD Regional Outlook 2016
Labour productivity of remote rural areas has recently declined

Productivity levels of Predominantly Urban regions = 100

- RURAL CLOSE TO CITIES
- Total RURAL
- RURAL REMOTE
Catching-up regions are characterised by a stronger intensity of the tradable sectors.

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).
Tradable and non-Tradable sectors tend to have different trends of Unit Labour costs
Non-tradable labour costs are often disconnected from productivity: Spain

Labour productivity (real GDP per employment) in Spain

Personnel cost per employee in Spain
Globalisation and Territories
Globalisation waves: the three Great Unbundling's (Baldwin, 2006)

1st Unbundling: late XIXth century; 1960’s – 1970’s
• Trade liberalization enables to separate the location of consumption and production. First, specialization in sectors (inter-industry trade), then specialization by product variety (intra-industry trade). North specializes in high-tech goods, while South specializes in low-tech goods.
• This increases the divide between North and South and between skilled and unskilled labor.

2nd Unbundling: 1990’s
• Fall in transportation prices and new technologies enable global value chains develop (GVCs). Specialization takes place within firms at the task level, thus both high and low skills are affected. It is difficult to identify ex ante the winners and losers. Emerging markets integrate in the global value chain, but changes in specialization depend on market access.
The 3rd Globalisation Unbundling: early XXI\textsuperscript{th} century

- *The Production and Use of Knowledge are separated.* Middle income countries (BRIICS) appropriate property rights and are the main drivers of growth at the global level.

- Models of *open innovation*, non technological innovation, global R&D networks. Cooperation and competition coexist in knowledge production. *Public knowledge goods* can be produced in a decentralised way inducing complementarities between efficiency and equity.

- *Geography matters again* as open innovation & consumer driven innovation becomes more localized.

- But innovation diffusion of innovation may be limited, thus *inequalities can occur between and within countries*. In particular, core locations advantages may increase regional disparities.
Strategies for low-density areas

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

1. 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.
How to promote productivity catching-up of rural areas?
Different types of rural areas, different policy challenges

Three types of rural regions

- **Rural inside the functional urban area (FUA)**
  - Challenges with service delivery, matching of skills, land use policies
- **Rural outside but in close proximity to the FUA**
  - Challenges to balance economic and social diversity and competition for land and landscape
- **Rural is remote from the FUA**
  - Challenges to mobilise areas of absolute advantage, improving provision of essential services

- **Rural within Functional Urban Areas** – part of the catchment area
  - Challenges with service delivery, matching of skills, land use policies
- **Rural close to cities** – attract new residents, tend to have good industrial mix
  - Challenges to balance economic and social diversity and competition for land and landscape
- **Rural Remote** – primary activities play a relevant role in the regional economy
  - Challenges to mobilise areas of absolute advantage, improving provision of essential services
Urban and rural regions are increasingly integrated

- In OECD countries, 26% of population live in Predominantly rural regions (297 million)
- 20% in rural regions close to an urban area (235 million)
- 6% in remote rural regions (62 million)
OECD Regional Development policy paradigm

Compensating lagging regions does not work:

- Creates dependency, not development
- Richer regions may become reluctant to support lagging regions

OECD promotes ‘place-based’ policies focusing on:

- Use of regional **specific assets** (or create absolute advantages to stimulate competition & experimentation across regions)
- Create **complementarities among sectoral policies** at the regional (or local) level
- Use of **multi-level governance mechanisms** for aligning objectives & implementation
## Evolving OECD Rural Policy Paradigm

### Rural Policy 3.0

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Objectives</strong></td>
<td>Equalisation</td>
<td>Competitiveness</td>
<td>Well-being considering multiple dimensions of: i) the economy, ii) society and iii) the environment</td>
</tr>
<tr>
<td><strong>Policy focus</strong></td>
<td>Support for a single dominant resource sector</td>
<td>Support for multiple sectors based on their competitiveness</td>
<td>Low-density economies differentiated by type of rural area</td>
</tr>
<tr>
<td><strong>Tools</strong></td>
<td>Subsidies for firms</td>
<td>Investments in qualified firms and communities</td>
<td>Integrated rural development approach – spectrum of support to public sector, firms and third sector</td>
</tr>
<tr>
<td><strong>Key actors &amp; stakeholders</strong></td>
<td>Farm organisations and national governments</td>
<td>All levels of government and all relevant departments plus local stakeholders</td>
<td>Involvement of: i) public sector – multi-level governance, ii) private sector – for-profit firms and social enterprise, and iii) third sector – non-governmental organisations and civil society</td>
</tr>
<tr>
<td><strong>Policy approach</strong></td>
<td>Uniformly applied top down policy</td>
<td>Bottom-up policy, local strategies</td>
<td>Integrated approach with multiple policy domains</td>
</tr>
<tr>
<td><strong>Rural definition</strong></td>
<td>Not urban</td>
<td>Rural as a variety of distinct types of place</td>
<td>Three types of rural: i) within a functional urban area, ii) close to a functional urban area, and iii) far from a functional urban area</td>
</tr>
</tbody>
</table>
Characteristics of Rural-Urban partnerships

Matching
..the appropriate scale

1. Better understanding of R-U conditions and interactions

2. Addressing territorial challenges through a functional approach

Including
..the relevant stakeholder

3. Working towards a common agenda for urban and rural policy

4. Building a enabling environment for R-U partnership

Learning
..to be more effective

5. Clarifying the partnership objectives and related measures
OECD Governance Models for rural-urban partnerships

Explicit rurban partnerships

- Rennes (France)
- Geelong (Australia)
- Nuremberg (Germany)
- Central Zone of West Pomeranian Voivodeship (Poland)
- BrabantStad (Netherlands)

Implicit rurban partnerships

- Forlì-Cesena (Italy)
- Extremadura (Spain)
- Castelo Branco (Portugal)
- Central Finland (Jyväskylä and Saarijärvi-Viitasaari) (Finland)
- Lexington (United States)
- Prague/Central Bohemia (Czech Republic)

Model 1
- Delegated functions:
  - Rennes (France)

Model 2
- No delegated functions:
  - Geelong (Australia)
  - Nuremberg (Germany)
  - Central Zone of West Pomeranian Voivodeship (Poland)
  - BrabantStad (Netherlands)

Model 3
- Delegated functions:
  - Extremadura (Spain)
  - Forlì-Cesena (Italy)

Model 4
- No delegated functions:
  - Lexington (United States)
  - Prague (Czech Republic)
  - Central Finland (Jyväskylä and Saarijärvi-Viitasaari) (Finland)
  - Castelo Branco (Portugal)

Role of subnational & local governments
Devolution of spending at lower levels of government is a feature of development.
Subnational Governments are key policy actors across the OECD

Share of general government (in %)

- Expenditure: 11.8% (Portugal, 2014), 41.0% (OECD, 2014), 41.0% (1995)
- Staff expenditure: 17.4% (Portugal, 2014), 63.2% (OECD, 2014), 63.2% (1995)
- Public Procurement: 27.5% (Portugal, 2014), 49.8% (OECD, 2014), 49.8% (1995)
- Investment: 45.9% (Portugal, 2014), 58.8% (OECD, 2014), 58.8% (1995)
- Tax revenue: 9.8% (Portugal, 2014), 31.6% (OECD, 2014), 31.6% (1995)
- Debt: 3.1% (Portugal, 2014), 19.8% (OECD, 2014), 19.8% (1995)
Almost 60% of total public investment across the OECD (2014)

Source: OECD National Accounts
What are the sources of Subnational governments’ revenues?

- Taxes
- Grants & subsidies
- Tariffs & fees
- Property income
- Social contributions

The bar chart shows the percentage contribution of various sources to the revenues of subnational governments across different countries. For example, Portugal has a high percentage of its revenues coming from grants & subsidies, with taxes also making a significant contribution. The chart also highlights the diversity of revenue sources across OECD regions, with countries like the United States, Germany, and France showing a balanced mix of tax, grant, and property income contributions.
Public investment is often the main adjustment factor during crisis

- The decline is particularly marked in the EU at the subnational level

**Subnational expenditures in the EU (2006-2014)**

- Intermediary consumption
- Social expenditure
- Total public expenditures
- Staff expenditures
- Investment
- PIB

Base 100 = 2005
Bottom-line

• Regional and rural development policies are key for national productivity growth.

• Their contribution is even greater when considering the contribution of environmental and social dimensions of well-being.

• Therefore, they have to be properly integrated in the structural policy package for inclusive growth.
OBRIGADO!
THANK YOU!