

## How Regions Grow

**Do regions vary more in economic performance than countries?**

**Is there only one way to attain high growth rates?**

**Is regional inequality increasing or decreasing?**

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### Introduction

Technological change, an aging work force and a global economic downturn are posing enormous challenges to OECD regions. While some regions are equipped to confront and handle these changes, others are struggling to remain competitive.

Given that the world's economy has never been more interdependent, differences across regions within countries are often greater than differences between countries; yet economists, policy makers and international organisations have paid less attention to regional development than to national growth. Marked variations in economic performance among OECD regions reflect the regions' great diversity in income levels, employment rates, mixes of high and low productivity, assets, comparative advantages, stages of development and public policies.

The current debate on regional policy and development focuses on whether policies should be pro-equity or pro-efficiency, implying that a trade-off is inevitable. The OECD doesn't share this view. Instead, it reframes the debate, arguing that national governments should promote growth in *all* regions. And regions should invest in their own growth by mobilising local assets and resources so as to capitalise on their specific competitive advantages, rather than depending on national transfers and subsidies to help them grow.

This *Policy Brief* discusses how innovation and other growth factors are linked to geography, explaining why some regions grow while others do not. It also suggests that comparative advantages and complementarities across regions will help ensure that growth in one place produces benefits elsewhere. ■

### Do regions vary more in economic performance than countries?

OECD regions vary more in their economic performance than do individual OECD countries. At the national level, the main determinants of growth are macroeconomic factors, institutions and policies. The latter two factors have a strong regional dimension. Each OECD region is endowed with different production capacities, comparative advantages, geographic characteristics, institutions, policies and assets.

In an increasingly interconnected world, it is no surprise that some regions are in a better position to reap the benefits of globalisation than others. Technological change has led to a rapid growth of service industries and the knowledge-based economy. As a result, regions that produce information and knowledge are better equipped to compete in that economy. Nonetheless, a region's capacity to innovate is not its only source of growth. Equally important is its ability to create a well-educated population, to attract and retain talented people, to be well connected to global markets, and to have a business-friendly environment and infrastructure system, and a well-functioning labour market.

The great heterogeneity that exists among regions translates into marked differences in their economic performances. The spread of growth in GDP, GDP per capita and productivity over the last ten years varied more among regions than among countries (Table 1). For example, the average annual GDP growth rate, in real terms, at the national level varied from 1.1% in Japan to 7.5% in Ireland between 1995 and 2005. Over the same period, annual average growth rates in real GDP across TL2 regions (see Box 1) ranged from -1.7% in Berlin (Germany) to 8.5% in the southern and eastern regions of Ireland. The variation was even larger across TL3 regions, from a low annual average growth rate of -7.8% in Kilis (Turkey) to a high of 9.4% in southwest Ireland, almost three times larger than the variation across countries. OECD regions also displayed similar variations in GDP per capita and productivity levels. ■

**Table 1.**  
**SPREAD OF GROWTH IN GDP, GDP PER CAPITA AND PRODUCTIVITY ACROSS OECD COUNTRIES, TL2 AND TL3 REGIONS, 1995-2005**

		Change in real GDP	Change in real GDP per capita	Change in GDP per worker (labour productivity)
Countries	Min.	1.1% (Japan)	1.0% (Japan)	-0.4% (Spain)
	Max.	7.7% (Ireland)	6.0% (Ireland)	4.8% (Poland)
	Range	6.3 pp	5.0 pp	5.2 pp
TL2	Min.	1.7% (Berlin, DEU)	-1.8% (Adana, TUR)	-3.8% (Champagne-Ardenne, FRA)
	Max.	8.5% (Southern and Eastern, IRL)	7.1% (Southern and Eastern, IRL)	7.1% (Podlaskie, POL)
	Range	10.2 pp	8.9 pp	10.9 pp
TL3	Min.	-7.8% (Kilis)	-6.2% (Kilis)	-5.4% (L'Aquila)
	Max.	9.4% (South-West, IRL)	8.7% (South-West, IRL)	11.1% (Südthüringen, DEU)
	Range	17.2 pp	14.9 pp	16.5 pp

\* pp refers to percentage points.

Note: GDP data for Turkey are only available for 1995-2001, and for the United States for 1997-2005. TL3 data are not available for Australia, Canada, the United States and Mexico.

Source: OECD Stat and OECD Regional Database (2008).

### Is there only one way to attain high growth rates?

Economic performance varies considerably among regions because of several factors, including geography, demographics, specialisation, productivity, physical and human capital, infrastructure and the capacity to innovate. Sometimes these factors reinforce each other; in other cases, they may counteract one another.

Comparing growth rates over the past decade between predominately urban and predominantly rural OECD regions reveals that not only do a significant number of urban regions grow faster than rural regions, but a significant number of rural regions out-perform urban regions in terms of GDP per capita (Figure 2).

Similarly, performance among intermediate regions vary significantly: some are growing faster than the OECD average while others are growing more slowly.

The emerging theory of the New Economic Geography has tried to address the question as to why economic activity concentrates in some areas and not in others. An over-simplified explanation of this theory suggests that economic concentration equals economic efficiency, and high sustainable growth rates can only occur in areas where the economy is highly concentrated.

The actual theory is more complex, however. OECD data and analysis reveal that agglomerations *do not necessarily lead* to sustained high annual average growth rates. For example, out of the sample of 78 OECD metro regions, only 45% grew faster than their respective national averages over the past decade.

This means that there are opportunities for growth in all OECD regions. Policies that only boost agglomeration, such as investment in hard infrastructure, will not automatically lead to higher growth. Indeed, the potential for non-agglomerations, including rural and intermediate regions

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#### Box 1. THE OECD'S REGIONAL TYPOLOGY

In any analytical study conducted at sub-national levels, defining the territorial unit is of prime importance, as the word region can mean very different things both within and among countries. In this publication, region is used to mean a sub-unit within a country, rather than supra-national groupings of countries.

How does the OECD classify regions within each member country? Its classification is based on two territorial levels. The higher level (Territorial Level 2 – TL2) consists of 335 large regions, while the lower level (Territorial Level 3 – TL3) is composed of 1 679 small regions. All the regions are defined within national borders and in most cases correspond to administrative regions. Each TL3 region is contained within a TL2 region.

This classification – which, for European countries, is largely consistent with the Eurostat classification – helps us compare regions at the same territorial level. Indeed these two levels, which are officially established and relatively stable in all member countries, are used as a framework for implementing regional policies in most countries.

Note: For more information please see: *OECD Regions at a Glance*, 2009, OECD, Paris.

and medium-size cities, to grow should not be underestimated, and should be better integrated in policy decisions. ■

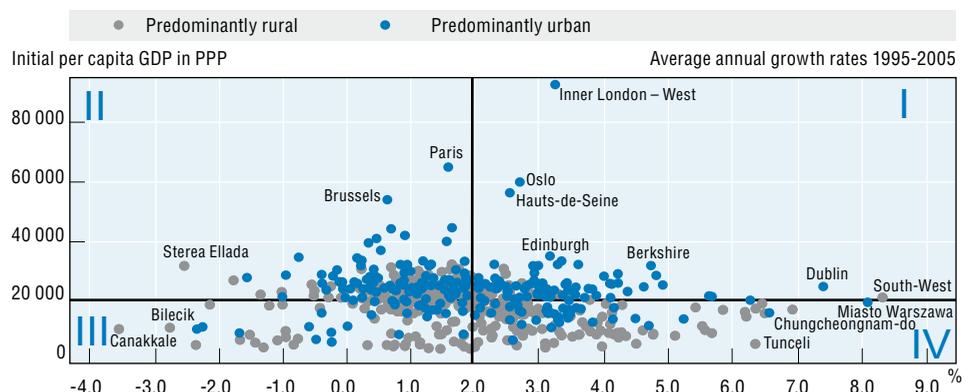
**Is regional inequality increasing or decreasing?**

There is no conclusive evidence that average GDP per capita has begun to converge among OECD regions. In most OECD countries, regional policies were introduced in the 1950s and 1960s, a period of relatively strong economic growth, fiscal expansion and low unemployment. The principal objective of those measures was greater equity and balanced growth in a period of rapid industrialisation. The main instruments used were wealth redistribution through financial transfers by the national government, accompanied by large-scale public investments. During the 1970s and early 1980s, successive economic shocks and changes in the global economy led to the emergence of geographical concentrations of unemployment in many countries, and regional policy evolved rapidly to address this new challenge. In the early years, regional policies focused on reducing disparities, such as in income and infrastructure stock. Later, the focus was widened to include creating employment.

Overall, the results of these policies were disappointing; within individual countries, regional convergence is a slow process. For example, during the past decade, inequality among regions increased in about 70% of OECD countries; in the remaining 30% of countries it decreased (Figure 2). Analysis carried over a longer time period (1980-2005) reveals that in approximately one-third of OECD countries, regional inequalities in GDP per capita increased, in one-third of countries they declined, and in the remaining third there was no clear trend.

Is there any evidence that OECD regions have entered into an overall process of convergence? Two supplementary analyses measuring trends of convergence among 335 OECD TL2 regions over the past decade find that

**Figure 1.**  
INITIAL GDP PER CAPITA AND ANNUAL AVERAGE GROWTH RATES IN GDP PER CAPITA AMONG PREDOMINANTLY URBAN AND RURAL OECD TL3 REGIONS, 1995-2005



Source: Calculations based on data from OECD Regional Database (2008).

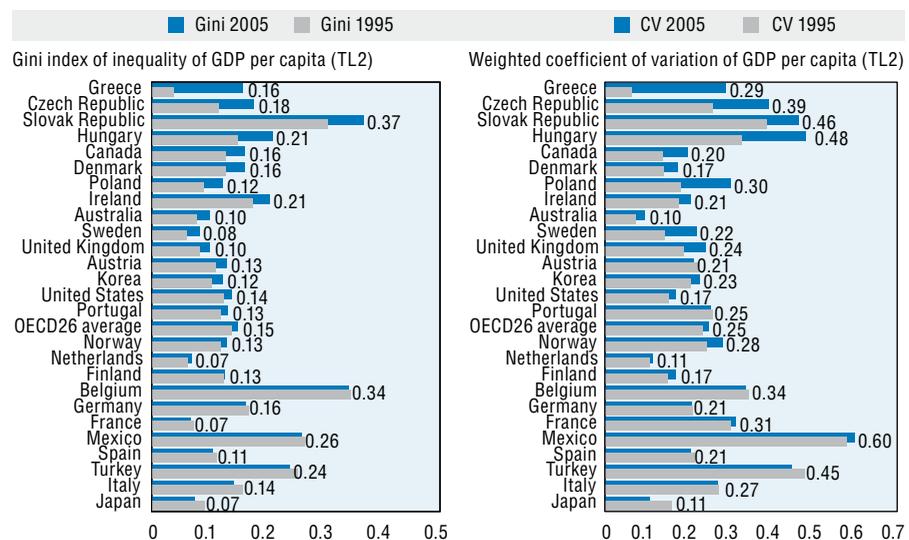
overall convergence is not occurring; but if such variables as innovation, human capital and infrastructure coalesce, then some convergence does take place. Therefore, if convergence is the goal, then regions lagging behind in economic growth should work to improve these key determinants.

In response to poor outcomes, regional policy has evolved, and continues to evolve, from a top-down, subsidy-based group of interventions designed to reduce regional disparities, into a much broader family of policies designed to improve regional competitiveness. These policies are characterised by: a strategic concept or development strategy that covers a wide range of direct and indirect factors that affect the performance of local firms; a focus on endogenous assets, rather than exogenous investments and transfers; an emphasis on opportunity rather than on disadvantage; and a collective/negotiated governance approach, involving national, regional and local government plus other stakeholders, with the central government playing a less dominant role. The new regional approach is based on the principle that opportunities for growth exist in the entire territory, across all types of regions. The aim is to maximise national output by encouraging each individual region to reach its growth potential from within. Before, policy makers regarded regional polices as a zero sum game. Recent reforms of regional policy in a number of OECD countries provide evidence that this thinking has undergone a paradigm shift. ■

**What are the main factors driving regional growth?**

Opportunities for growth exist in all regions, and national governments should promote growth accordingly. Greater growth occurs when regions are able to mobilise their own local assets and resources, rather than depend on support from the national government. Fostering growth, even in regions that are lagging economically, is in the interest of national governments as it contributes to national output without hindering growth opportunities elsewhere.

**Figure 2.**  
**TERRITORIAL DISPARITIES WITHIN COUNTRIES (TL2 REGIONS, 1995-2005)**



Source: OECD Regional Database (2008) and own calculations.

OECD analysis of the key determinants of regional growth, the length of time needed for these factors to generate growth, and the most successful combinations of factors leads to several suggestions for effective regional policies:

- **Provide infrastructure as part of an integrated regional approach.** The analysis suggests that infrastructure alone has no impact on regional growth unless regions are endowed with adequate levels of human capital and innovation. In other words, infrastructure is a necessary, but insufficient, condition for growth. The analysis also reveals that it takes about three years for infrastructure to positively influence growth.
- **Invest in human capital.** Regions with well-educated populations will grow. Investments in tertiary education take about three years to have a positive impact on regional growth.
- **Emphasise innovation and research and development.** Investments in R&D have a positive effect on patent activity in all categories, as do R&D expenditures by businesses, the public sector, higher-education institutions and the private non-profit sector. However, innovation is a longer-term process and appears to have a positive influence on regional growth only after five years. The analysis suggests that as capital and talent agglomerate, they tend to positively influence growth in neighbouring regions. However, innovation remains a highly localised element.
- **Focus on integrated regional policies.** Agglomeration economies are partly responsible for regional growth. Sources of growth from within regions, such as human capital and innovation, are more important than a region's physical distance from markets. Although a region with good accessibility to markets has an added advantage, its growth depends on the presence of human capital, innovation, infrastructure and economies of agglomeration. Regions perform well when local actors in a regional innovation system can communicate easily with each other. Indeed, one region's performance strongly influences neighbouring regions, suggesting that inter-regional trade and inter-regional linkages play an important role in regional growth. ■

### How can regional policies mitigate the effects of the financial crisis?

In an economic crisis, the temptation to invest heavily in hard infrastructure is strong. Indeed, investing in public infrastructure is a key policy response to economic recession. But evidence from OECD countries suggests that a more integrated approach will have a better impact on growth. Many countries are now reviewing their approaches to regional investment with the aim of giving higher priority to “soft” infrastructure, particularly by developing human capital and supporting innovation. This implies that regional policies could play an important role in shaping growth and economic recovery.

Regional policies can also provide a practical way of accelerating and maximising the impact of investments. Territorial development policies often have defined and agreed strategies that incorporate investment projects. Even if governments want to stimulate economic activity by developing infrastructure, pushing investment projects forward can be difficult

without clear road maps based on agreed priorities, needs assessments and stakeholder buy-in. Regional development strategies often represent such agreed and validated road maps. And integrating investment projects into a coherent strategy can spread their beneficial effects.

Regional policies also often use well-developed mechanisms for co-ordination between the central and sub-national levels. They can mobilise local and regional knowledge, funds and capacity, and help to ensure transparency and coherence. In the majority of OECD countries, the sub-national level is responsible for most capital investment. Given that fact, close co-ordination will be required to ensure that local and national investment priorities are aligned. ■

### For further information

For further information about this *Policy Brief* and the publication *How Regions Grow: Trends and Analysis*, contact: Jose Enrique Garcilazo, e-mail: [JoseEnrique.Garcilazo@oecd.org](mailto:JoseEnrique.Garcilazo@oecd.org), tel.: +33 1 45 24 86 18.



### For further reading

OECD (2009), OECD eXplorer, available at [www.oecd.org/gov/regional/statisticsindicators/explorer](http://www.oecd.org/gov/regional/statisticsindicators/explorer).

OECD (2009), **How Regions Grow: Trends and Analysis**, ISBN 978-92-64-03945-2, € 30, 140 pages.

OECD (2009), **OECD Regions at a Glance 2009**, ISBN 978-92-64-05582-7, € 50, 240 pages.

OECD (2007), **Linking Regions and Central Governments: Contracts for Regional Development**, ISBN 978-92-64-03945-2, € 40, 200 pages.

OECD (2007), **OECD Reviews of Regional Innovation: Competitive Regional Clusters**, ISBN 978-92-64-03182-1, € 50, 296 pages.

OECD (2007), **OECD Regions at a Glance 2007**, ISBN 978-92-64-00987-5, € 50, 252 pages.

OECD (2006), **Territorial Reviews Competitive Cities in the Global Economy**, ISBN 978-92-64-02708-4, € 37, 450 pages.

OECD (2006), **OECD Rural Policy Reviews: The New Rural Paradigm: Policies and Governance**, ISBN 978-92-64-02390-1, € 30, 165 pages.

OECD (2005), **Building Competitive Regions: Strategies and Governance**, ISBN 978-92-64-00946-2, € 30, 142 pages.

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