

4. REGIONAL CONTRIBUTIONS TO GROWTH IN NATIONAL GDP

Between 1998 and 2003, gross domestic product (GDP) in OECD countries grew at an average annual rate of 3.1% in real terms (Figure 4.1). International differences in growth rates were as large as 7.5 percentage points, ranging from 1% in Japan to 8.5% in Ireland. Although significant, international differences are rather small in comparison to differences among regions within the same country.

Differences in regional growth are largest in Turkey

During 1998-2003 the difference between the fastest and the slowest growing regions was largest in Turkey (19.7 percentage points), followed by Hungary (12.9), the United Kingdom (10.8), Canada (9.7), and Poland (9.4) (Figure 4.2). In Spain, the Czech Republic, Korea, the United States, and Mexico, regional differences were smaller but still considerable (6.2 to 8.6 percentage points). GDP growth was more even in the Slovak Republic (1.0), Denmark (2.5), Japan (2.7) and Belgium (3.3).

Regional variations are unrelated to national growth

Wide differences in regional growth rates do not seem to be associated with faster national growth. While Turkey had the largest regional variation in GDP growth, its national growth rate was among the lowest among OECD countries. For its part, Canada displayed one of the highest degrees of regional variation in GDP growth, but its national growth was one of the highest among OECD countries.

Large differences in regional growth rates imply that national performance is driven by the dynamism of a limited number of regions. On average, 10% of regions accounted for 43% of the total increase in GDP in OECD countries between 1998 and 2003 (Figure 4.3). The regional contribution was more pronounced in certain countries, where 10% of regions accounted for more than half of national GDP growth. This was the case in Turkey (88%), Hungary (56%), Sweden (55%), Norway (54%), Finland and Portugal (52%). Elsewhere, the 10% of regions that made the largest contribution to national GDP growth played a less pronounced but still significant role, ranging from 25% (Belgium and Australia) to 51% (Greece). Only the Slovak Republic (19%) and the Netherlands (23%) displayed a more balanced regional contribution to national GDP growth.

Declines in GDP are highly correlated with regional performance

Decreases in regional GDP are rare – declines were observed in only ten countries and tended to be localised. On average, 91% of decreases in GDP in the OECD area between 1998 and 2003 (Figure 4.4) were attributable to 10% of regions. In the Czech Republic, France, Germany, Hungary, Italy, Japan, Poland and the United Kingdom, the overall decrease in GDP was due to one or two regions.

These trends show that national GDP growth is fuelled by the performance of a few regions. Growth at the national level is often rooted in the specific assets of regions.

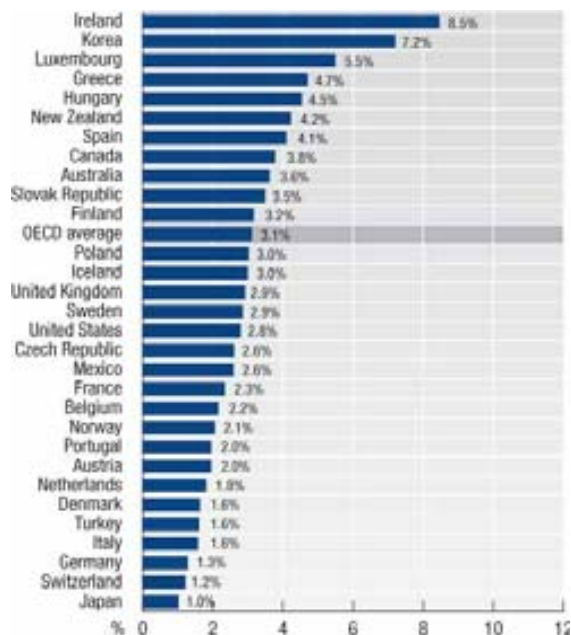
Definition

The gross domestic product (GDP) growth rate refers to the annual growth rate over the period 1998-2003 deflated at constant (2000) prices. GDP is the final result of the production activity of resident producer units.

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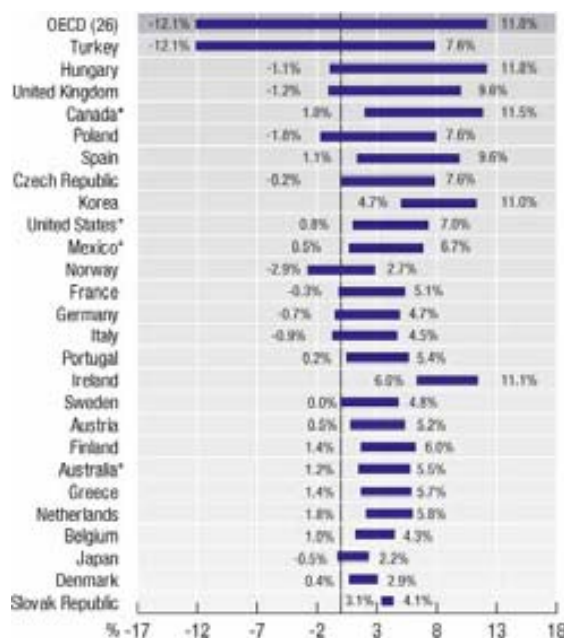
4.1. From 1998 to 2003, GDP growth varied significantly among OECD countries...

Average annual growth rate in national GDP, 1998-2003



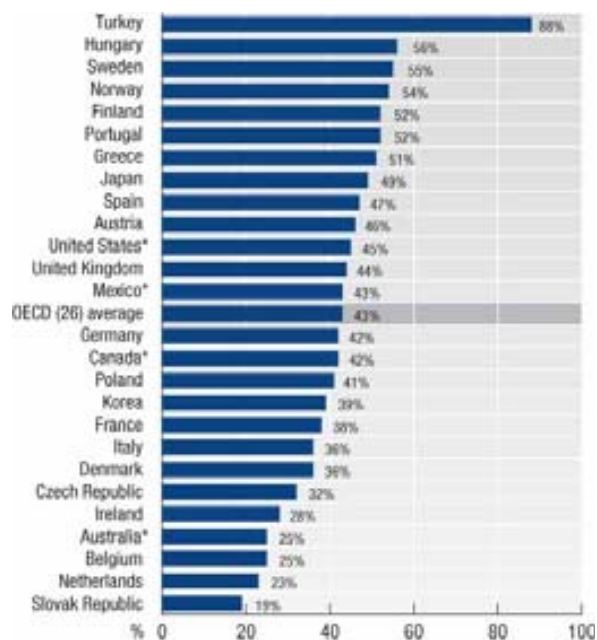
4.2. ... but the variation in GDP growth rates was even wider among regions within countries

Range in annualised GDP growth across sub-national regions, 1998-2003 (TL3)



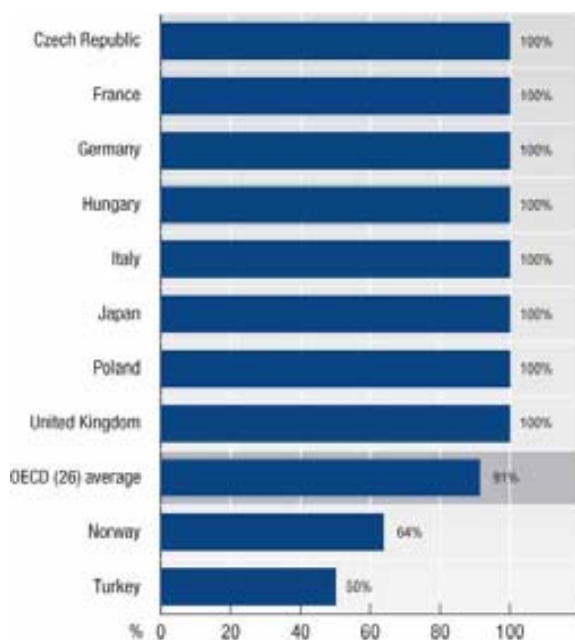
4.3. On average 10% of regions accounted for 43% of the overall increase in GDP

Proportion of increase in national GDP due to 10% of regions with the largest increase, 1998-2003 (TL3)



4.4. 91% of the overall decline in GDP took place in just 10% of regions

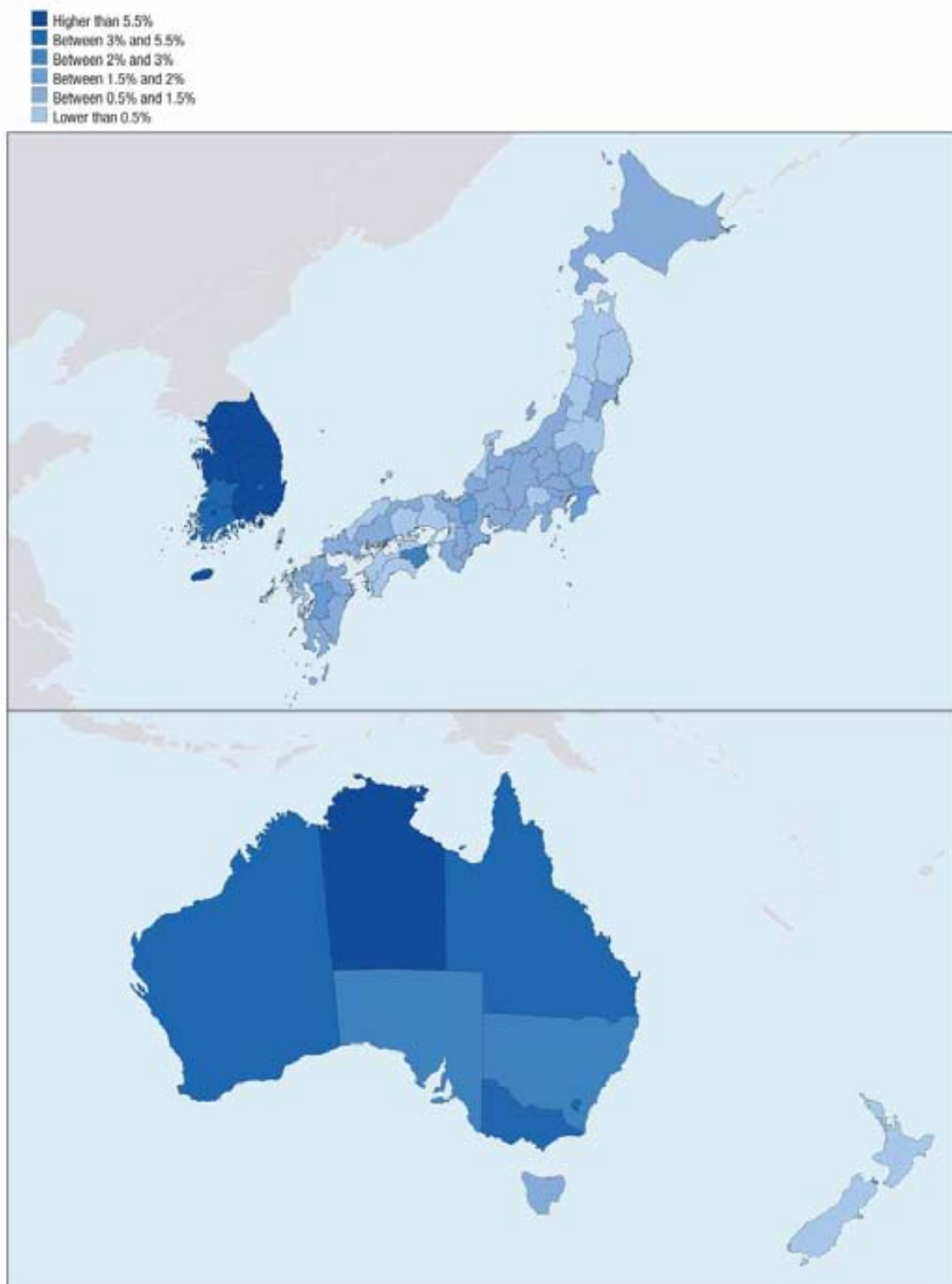
Proportion of decline in national GDP due to 10% of regions with the largest decline, 1998-2003 (TL3)




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4.5. Regional GDP growth: Asia and Oceania

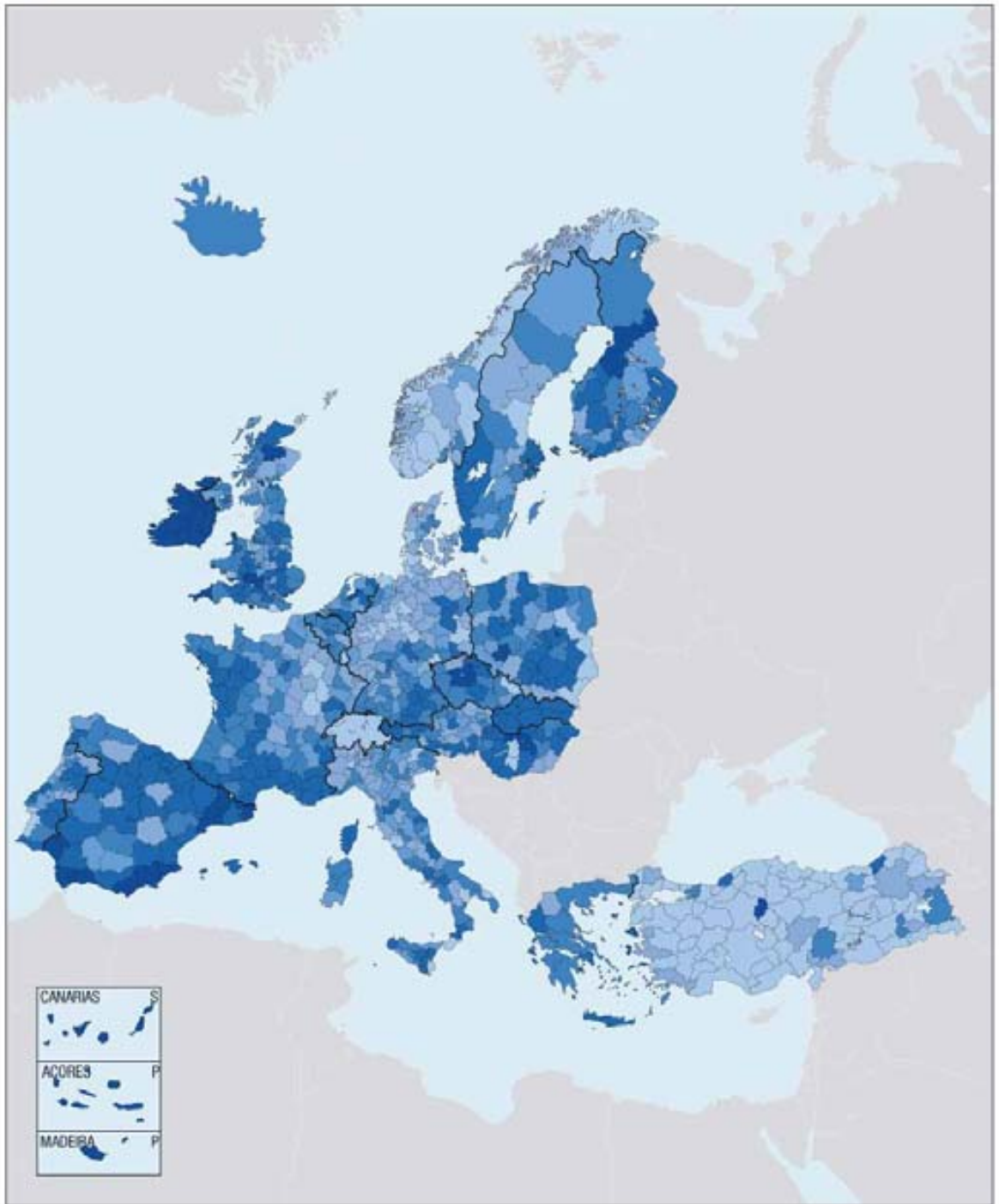
Average annual growth rate in constant 2000 GDP, 1998-2003



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4.6. Regional GDP growth: Europe

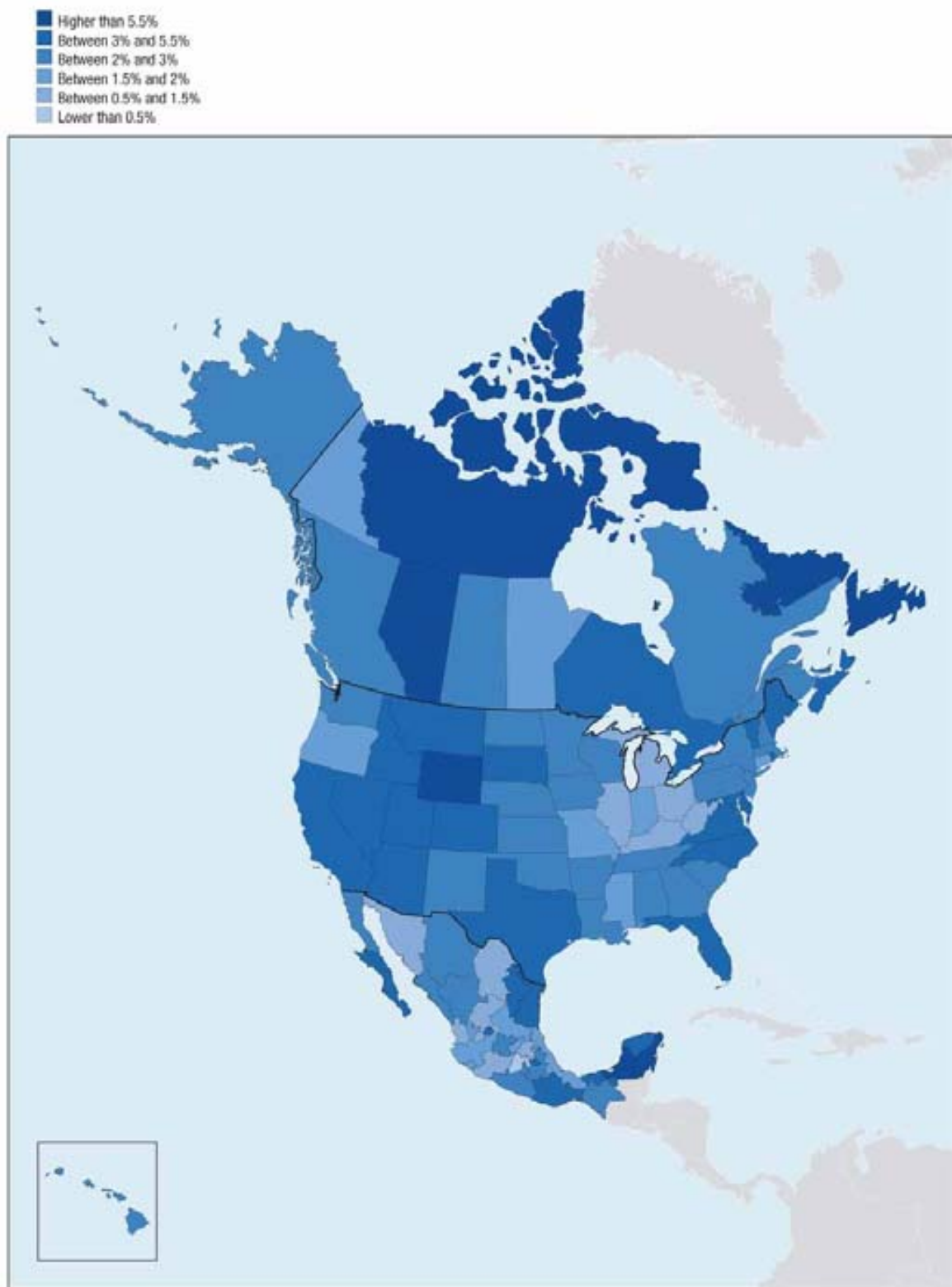
Average annual growth rate in constant 2000 GDP, 1998-2003



StatLink <http://dx.doi.org/10.1787/078845266850>

4.7. Regional GDP growth: North America

Average annual growth rate in constant 2000 GDP, 1998-2003



StatLink  <http://dx.doi.org/10.1787/078845266850>

Is concentration good for growth?

Between 1998 and 2003, GDP grew faster, on average, in predominantly urban (2.4%) and intermediate regions (2.1%) than in rural regions (1.7%) (Figure 4.8).

Not only do urban and intermediate regions concentrate a very large share of national GDP (Chapter 3), they also tend to grow faster than rural regions. This pattern of high concentration and fast growth seem to be driven by the benefits stemming from “economies of agglomeration”.

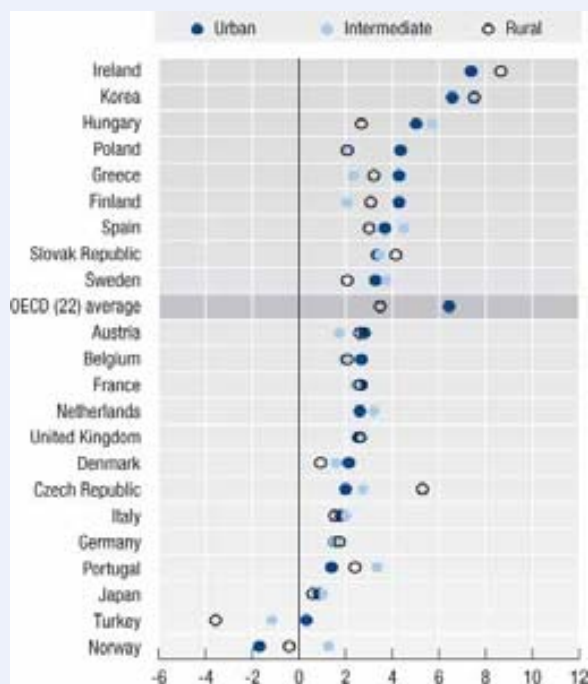
First, firms benefit from lower transport costs when they are close to other firms and people (local demand). Second, information flows locally more easily than over greater distances so that firms have more opportunities to learn from each other and imitate more efficient methods of production. Third, the employment opportunities created by a concentration of firms attract skilled workers, while the greater availability of specialised skills increases the productivity of firms. Finally, more intensive use of infrastructure by a larger number of firms increases the overall productivity of the regional economic system. As a result, GDP tends to grow faster in urban and intermediate regions, where economic activity and the workforce are more concentrated, than in rural ones.

Urban regions displayed the highest average GDP growth rates in 8 out of 22 OECD countries (Figure 4.8), while intermediate regions performed best in 10 out of 22. Predominantly rural regions were the fast growing areas only in the Czech Republic, Germany, Ireland and the Slovak Republic.

Although GDP tends to grow faster in urban and intermediate regions, rural regions are not necessarily trapped in a low-growth path. In fact in 9 out of 22 OECD countries, the region with the highest GDP growth was a rural region (Figure 4.9).

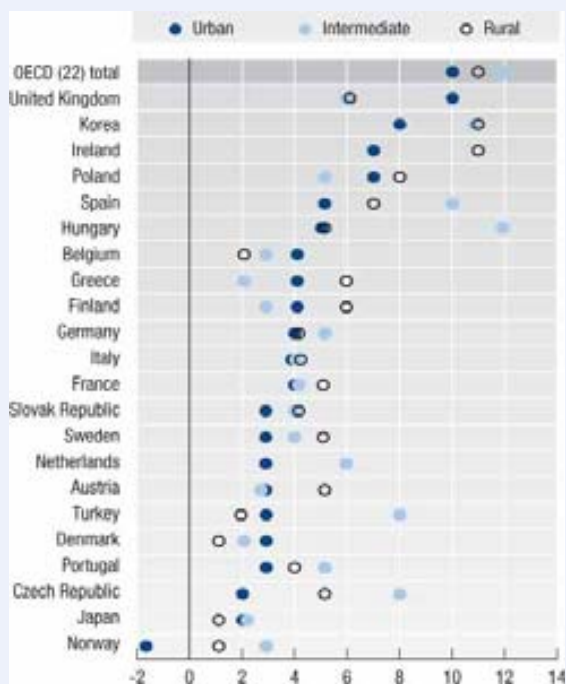
4.8. GDP grew faster during 1998-2003 in urban and intermediate regions than in rural ones...

GDP growth rate averaged by regional type,
1998-2003 (TL3)



4.9. ... although in 9 countries the highest GDP growth was recorded in a rural region

Highest annualised growth rate by regional type,
1998-2003 (TL3)



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Symbols and Abbreviations

OECD (25) average	Unweighted average of 25 OECD countries.
OECD (25) total	Sum over all regions of 25 OECD countries.
OECD (25)	Range of variation over all regions of 25 OECD countries.
TL2	Territorial Level 2.
TL3	Territorial Level 3
NOG	Non Official Grid
*	Differences in the definition of data or regions. Please check the “Sources and Methodology” section.
PU	Predominantly Urban
IN	Intermediate
PR	Predominantly Rural
PPP	Purchasing Power Parity
USD	United States Dollar





I. REGIONS AS ACTORS OF NATIONAL GROWTH

1. GEOGRAPHIC CONCENTRATION OF POPULATION
2. GEOGRAPHIC CONCENTRATION OF THE ELDERLY POPULATION
3. GEOGRAPHIC CONCENTRATION OF GDP
4. REGIONAL CONTRIBUTIONS TO GROWTH IN NATIONAL GDP
5. GEOGRAPHIC CONCENTRATION OF INDUSTRIES
6. REGIONAL CONTRIBUTIONS TO CHANGES IN EMPLOYMENT
7. GEOGRAPHIC CONCENTRATION OF PATENTS

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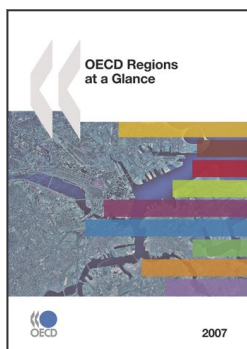
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