

22. REGIONAL FACTORS: POPULATION AND GDP PER CAPITA

A region's change in its OECD GDP share can be decomposed into national factors (*i.e.* changes in the national GDP share), population growth or changes in GDP per capita. Changes in population are due to natural demographic trends and migrants from other regions and countries. Growth in GDP per capita may be further decomposed into changes in GDP per worker (labour productivity), in employment rates (employment to labour force), participation rates (labour force to working age population) or in age activity rates (working age to total population) (see Annex C for formula).

From 1999 to 2005, among the 112 regions with an increased GDP share of total OECD, the increase was mainly due to region-specific factors (*i.e.* regional factors being no less than one-fourth) in 60 regions. Among these 60 regions the increase was entirely due to population growth in 22% (or 13) of regions. In 40% (or 24) the increase was entirely due to GDP per capita growth, and in the remaining 38 % (or 23) it was due to a relative increase in both components.

The relative increase in population was the main component of change of GDP growth in several of the 20 top performing regions (Figure 22.1); particularly in Quintana Roo (Mexico), Nevada, Arizona and Florida (United States), Murcia (Spain) and Alberta (Canada).

Among the top 20 highest performing regions, the (relative) increase in population in the Capital Region (Korea), Nevada and Arizona (United States) was large enough to offset the (relative) decrease in GDP per capita (Figure 22.3). In contrast the population decline in Newfoundland and Labrador (Canada), Wyoming (United States), Bratislav Kraj (Slovak Republic), Southern and Eastern (Ireland), Gyeongbuk and Gyeongnam region (Korea) was offset by the increase in GDP per capita (Figure 22.3) and by national factors in maintaining the ratio of regional aggregate GDP as a per cent of aggregate OECD GDP.

During 1999-2005, 34% (or 103) of OECD regions decreased their share in total OECD owing to region specific factors. The decline was entirely due to a decrease in population in 20% (or 19) of them (*i.e.* the growth difference in population between a region and its respective country was negative while the growth difference in GDP per capita between a region and its country was positive), a relative decrease in GDP per capita in 25% (or 26) of them. In the remaining 55% (or 57) regions the relative decrease was due to both components.

Among the 20 lowest performing regions in terms of growth of aggregate GDP, declines in GDP per capita were larger than declines in population (Figure 22.2).

In fact among these regions there were none with positive movements in GDP per capita, and only a few with positive gains in population growth. This means the (relative) increase in population in P.A. Trento, P.A. Bolzano-Bozen, Valle d'Aosta and Umbria (Italy) and in Bursa, Ankara and Adana (Turkey) was offset by the (relative) decrease in GDP per capita and by national factors (Figure 22.4).

Definition

Gross domestic product (GDP) is the standard measure of the value of the production activity (goods and services) of resident producer units. Regional GDP is measured according to the definition of the 1993 System of National Accounts. To make comparisons over time and across countries, it is expressed at constant prices (year 2000), using the OECD deflator and then it is converted into USD purchasing power parities (PPPs) to express each country's GDP into a common currency.

The total population of a given region can be either the annual average population or the population at a specific date during the year considered.

Source

OECD Regional Database, <http://dotstat/wbos/>, theme: Regional Statistics.

See Annex B for data sources and country related metadata.

Reference years and territorial level

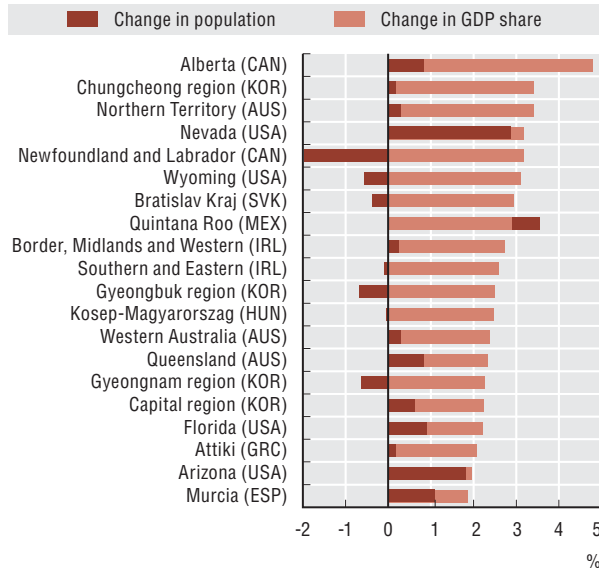
The decomposition of a region's share of OECD GDP is run in this section on TL2 regions over the period 1999-2005, with the following exceptions: Australia, Canada, Germany, Greece and Korea 1995-2005; Japan, Norway and the United States 1997-2005; Mexico 1998-2004; Turkey 1995-2001.

Regional GDP not available for Iceland, New Zealand and Switzerland.

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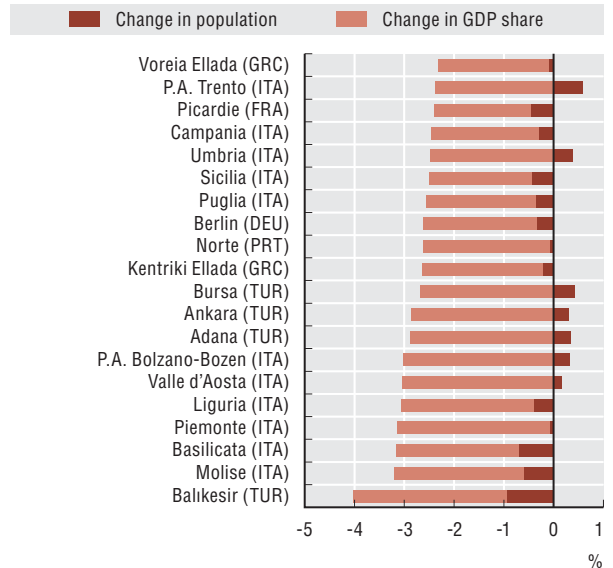
22.1 Annual change in population for TL2 regions ranked by largest increase in regional GDP relative to all GDP, 1999-2005

Relative increase in population was a key component of GDP growth in Quintana Roo, Mexico, and Arizona, US.



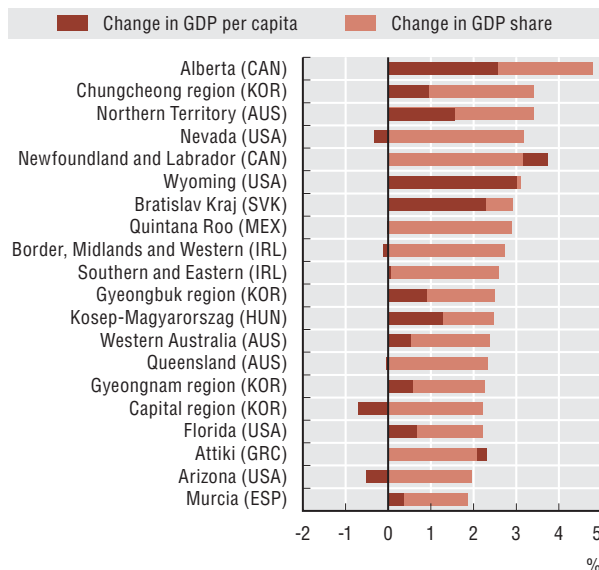
22.2 Annual change in population for TL2 regions ranked by largest decrease in regional GDP relative to all GDP, 1999-2005

Among the 20 bottom performing regions, declines in GDP per capita were larger than declines in population.



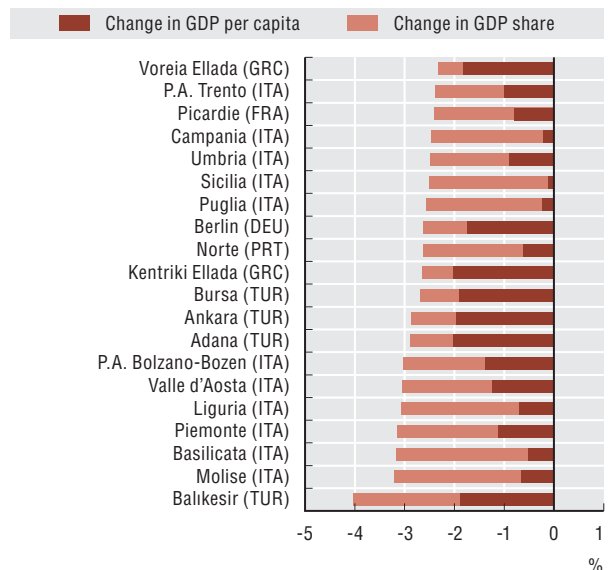
22.3 Annual change in GDP per capita for TL2 regions ranked by largest increase in regional GDP relative to all GDP, 1999-2005

Among the top 20 performing regions, the increase in population Capital Region, Korea, and Nevada, US, offset the decrease in GDP per capita.

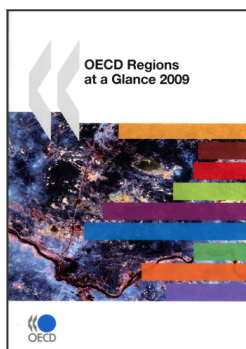


22.4 Annual change in GDP per capita for TL2 regions ranked by largest decrease in regional GDP relative to all GDP, 1999-2005

Among the 20 bottom performing regions, none displayed positive movements in GDP per capita.



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