

23. REGIONAL FACTORS: LABOUR PRODUCTIVITY

At the regional level, labour productivity is measured by GDP per worker capturing the efficiency of the regional production system. Although many factors influence a region's level of efficiency, labour productivity mainly depends on the balance between capital and labour (i.e. capital to labour ratios) and on the available technology (i.e. multifactor productivity) in a given region.

Differences in labour productivity are driven by both differences in natural endowments and by regional assets available in regions. The share of productivity growth due to irreproducible inputs (e.g. land, oil) can be seen as attributable to natural endowments. In contrast improvements due to reproducible resources (e.g. infrastructure, technology and skills) can be regarded as a function of the available assets in a region.

A rise in labour productivity relative to the country's growth rate may be due to a composition effect (i.e. a switch to more workers employed in sectors with higher value added i.e. higher capital to labour ratios), or to improvements in the average productivity of existing sectors (e.g. increasing the capital to labour ratios within sectors, better infrastructure, higher skill levels or more efficient production technology). Unfortunately at the regional level we cannot distinguish between these effects due to data limitations.

Increases in labour productivity are a key component of regional growth among top performing OECD regions. In fact labour productivity was the main source of growth increases in five out of the seven regions with the largest increase in total OECD GDP share from 1999 to 2005. These regions include Alberta and Newfoundland and Labrador (Canada), Northern Territory (Australia), Wyoming (United States) and

Bratislav Kraj (Slovak Republic) (Figure 23.1). Among the remaining fastest 20 growing regions labour productivity was the main contributor of fast growth in Attiki (Greece). Among the 20 slowest-growing regions in the GDP share of OECD, the decreases in labour productivity were particularly significant in the Turkish regions and Kentriki Ellada (Greece) (Figure 23.2).

Definition

Labour productivity is measured as the ratio of constant GDP in 2000 prices, to total employment where the latter is measured at place of work.

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

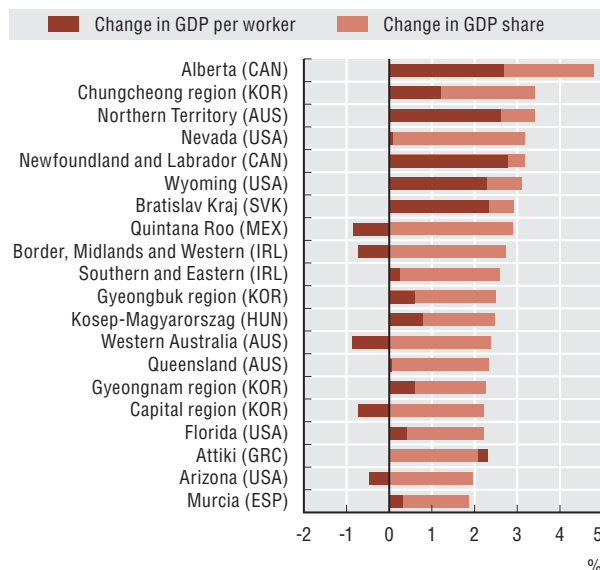
The decomposition of a region's share of OECD GDP is run in this section on TL2 regions over the period 1999-2005, with the following exceptions: Australia, Canada, Germany, Greece and Korea 1995-2005; Japan, Norway and the United States 1997-2005; Mexico 1998-2004; Turkey 1995-2001.

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

23.1 Contribution of GDP per worker

in the top 20 OECD TL2 regions, 1999-2005

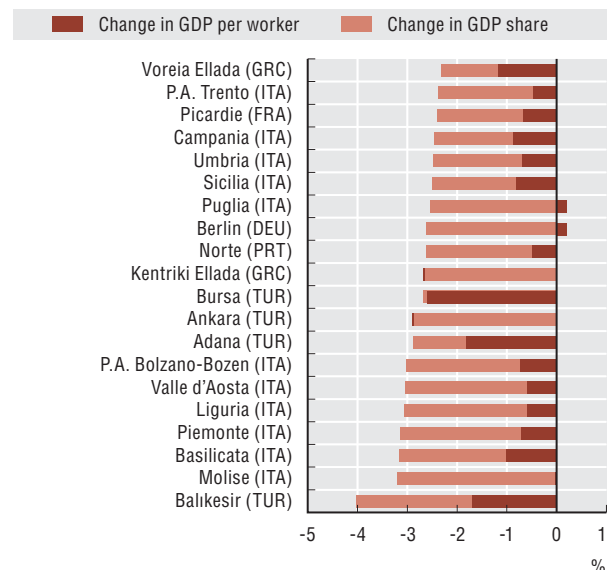
Labour productivity was the main source of growth in 6 out of the 20 regions with the largest increase in total OECD GDP share.



23.2 Contribution of GDP per worker

in the bottom 20 OECD TL2 regions, 1999-2005

Declines in labour productivity were particularly marked in Turkish regions.

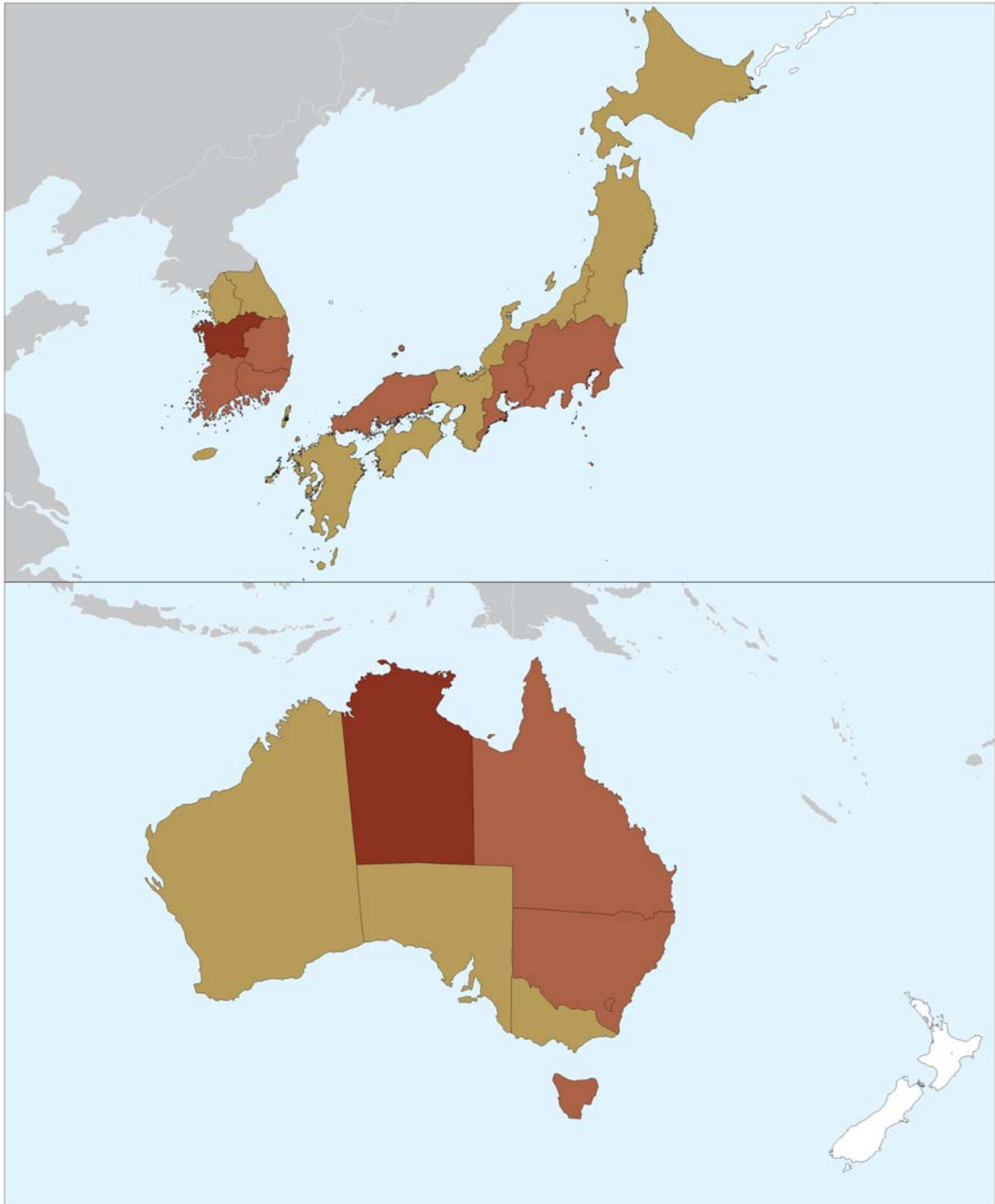


StatLink <http://dx.doi.org/10.1787/524163226074>

23.3 Change in the GDP share of the OECD due to change in GDP per worker: Asia and Oceania

TL2 regions; annual change 1999-2005

- Higher than 3%
- Between 1% and 3%
- Between 0% and 1%
- Between -1% and 0%
- Between -3% and -1%
- Lower than -3%
- Data not available



Australia and Korea 1995-2005; Japan 1997-2005.

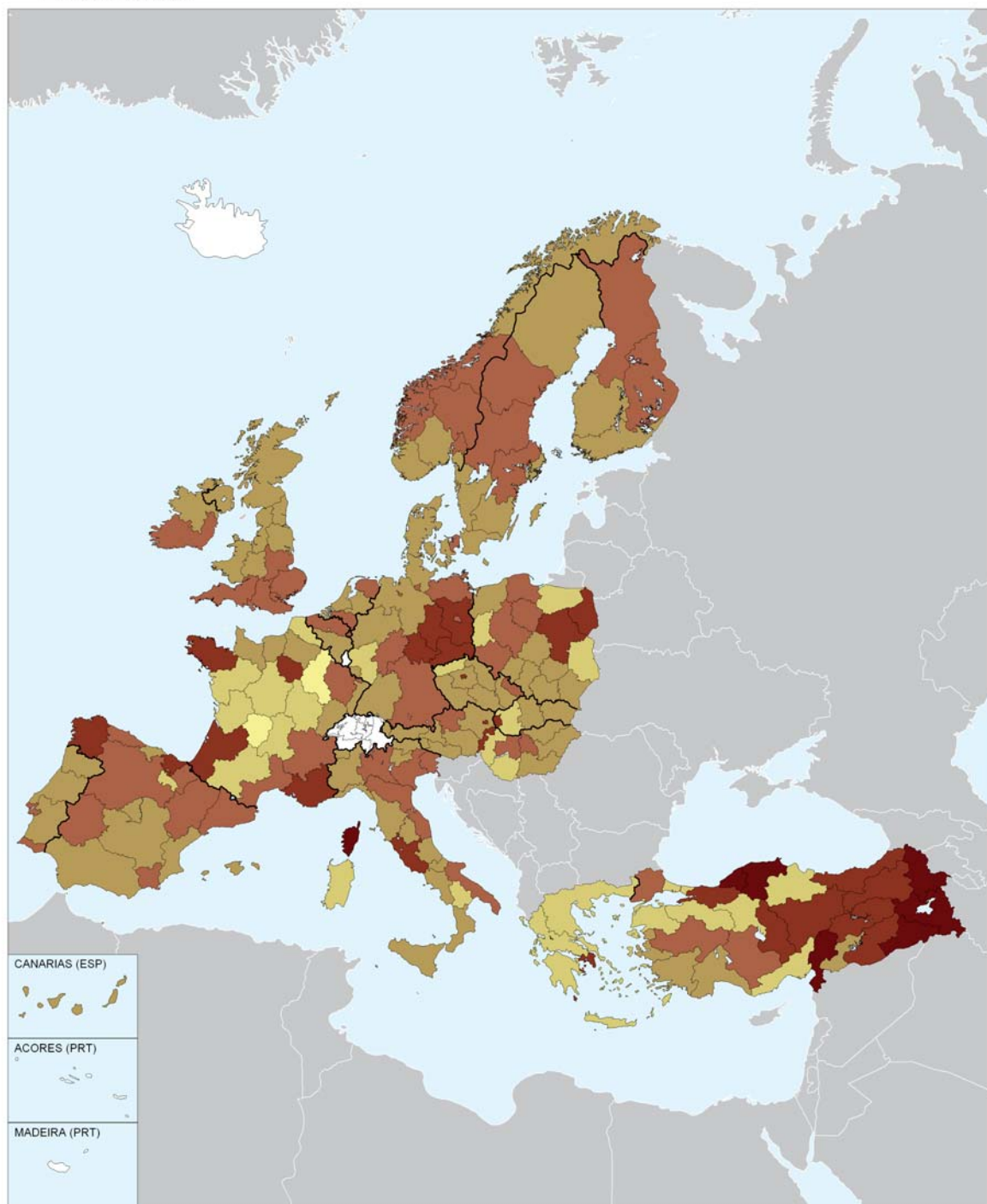
StatLink <http://dx.doi.org/10.1787/524838822036>

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23.4 Change in the GDP share of the OECD due to change in GDP per worker: Europe

TL2 regions, annual change 1999-2005

- Higher than 3%
- Between 1% and 3%
- Between 0% and 1%
- Between -1% and 0%
- Between -3% and -1%
- Lower than -3%
- Data not available



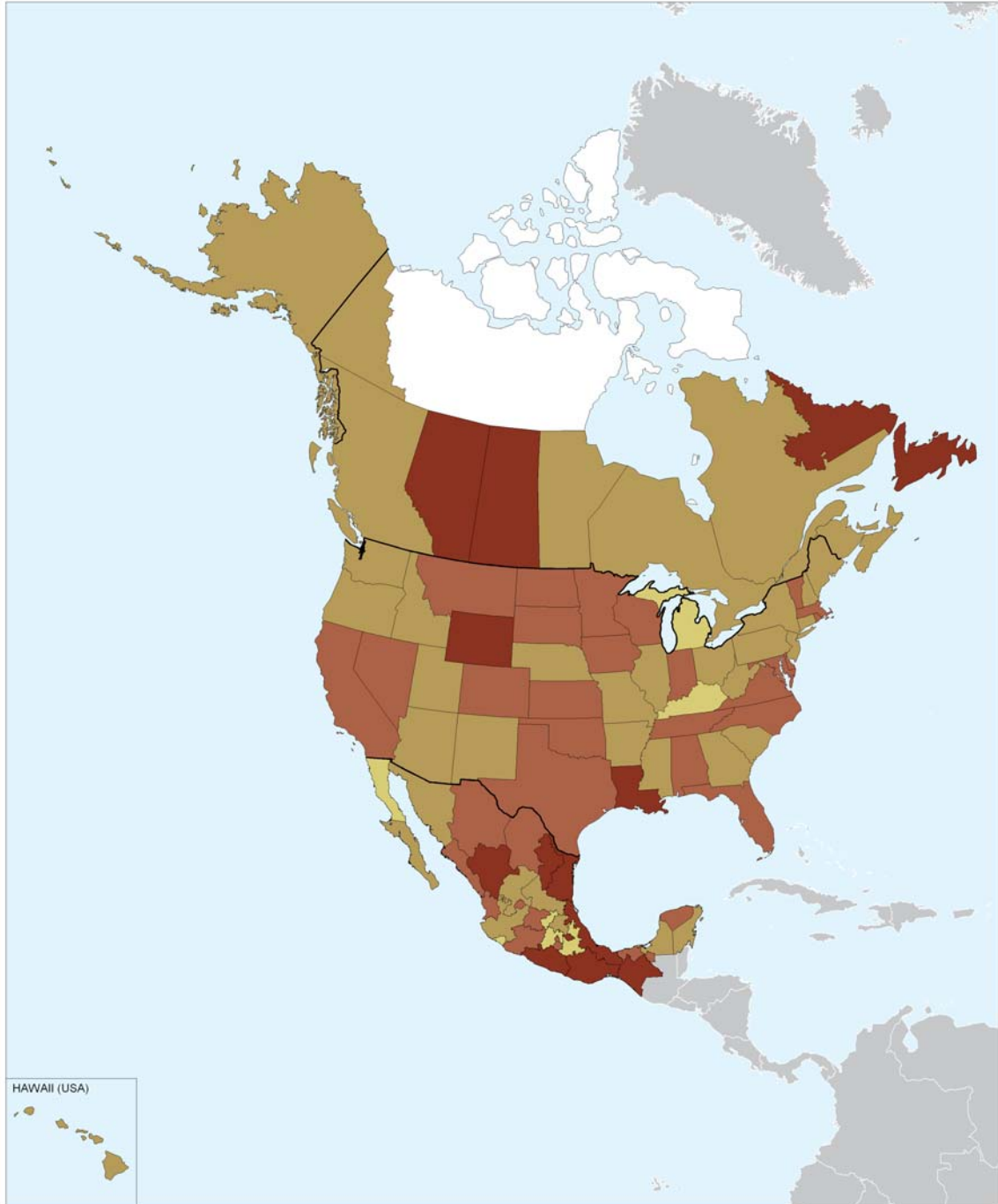
Germany and Greece 1995-2005; Norway 1997-2005; Turkey 1995-2001.

StatLink  <http://dx.doi.org/10.1787/524838822036>

23.5 Change in the GDP share of the OECD due to change in GDP per worker: North America

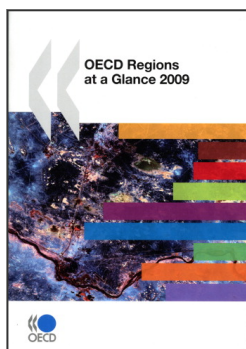
TL2 regions, annual change 1999-2005

- Higher than 3%
- Between 1% and 3%
- Between 0% and 1%
- Between -1% and 0%
- Between -3% and -1%
- Lower than -3%
- Data not available



Canada 1995-2005, Northwest Territories and Nunavut is excluded for lack of data for comparable years; the United States 1997-2005 and Mexico 1998-2004.

StatLink <http://dx.doi.org/10.1787/524838822036>



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