The contribution of metropolitan areas to national economies

Within countries, GDP per capita in the richest metropolitan areas is more than one-third higher than in other metropolitan areas.

While the COVID-19 crisis and the massive shift to remote working might reduce the benefits of density in the short term, assessing whether metropolitan areas will lose some of their capacity to attract population and highly-skilled workers will require time. Metropolitan areas – defined as functional urban areas (FUAs) composed of cities and their commuting zones – are able to generate a productivity premium from the proximity among firms and individuals, and long-term trends suggest that in OECD countries they have consistently shown higher levels of GDP per capita than other areas.

Metropolitan areas with at least half a million inhabitants accounted for 45% of the total OECD population and generated 52% of GDP in 2018 (Figure 2.17). Across OECD countries, there are significant differences in terms of the economic importance of metropolitan areas for the national economy. For instance, while metropolitan areas over half a million inhabitants represent more than 70% of the national GDP in Korea, Luxembourg and the United States, their share of the national economy falls below 30% in Lithuania, Norway and the Slovak Republic. Overall, the population tends to be less concentrated than GDP, with the exception of Chile and Korea, where the existence of natural-resource-based regional economies appears to play a role.

Stark differences in GDP per capita levels exist also across metropolitan areas of the same country, with the most developed metropolitan areas above half a million inhabitants having 36% higher GDP per capita than in other metropolitan areas of the same size and 80% higher than in the rest of the country, on average (Figure 2.18). The largest differences across metropolitan areas above half a million inhabitants are observed in Korea, the United Kingdom and the United States, where the gap exceeded 70%, twice the OECD average. Capital metropolitan areas (i.e. metropolitan areas that include the capital of the country) are the richest metropolitan areas in 18 out of the 30 OECD countries.

The economy of metropolitan areas has grown faster than in the rest of the country since the turn of the new millennium. According to OECD estimations, all metropolitan areas above half a million inhabitants, with the exception of those in Greece, experienced GDP growth between 2001 and 2018 (Figure 2.19). In most countries, metropolitan areas above half a million inhabitants experienced faster growth compared to the rest of the country, with the greatest differences observed in Lithuania and Poland, where the gap exceeded 1.5 percentage point between 2001 and 2018. Contrary to this trend, GDP grew slower in metropolitan areas than the rest of the country in Austria, Germany and Portugal.

During the period of 2001-18, GDP per capita in metropolitan areas over half a million inhabitants grew at different paces within countries, with some metropolitan areas even showing negative growth rates (Figure 2.20-Figure 2.21). The growth gap between the fastest and slowest growing metropolitan areas was largest in Australia, France, Poland and the United States. In the United States, fast-growing metropolitan areas, such as Utah, whose GDP grew by 5% in 2001-18, coexisted with shrinking metropolitan areas, such as Lehigh, Pennsylvania, whose GDP per capita declined by 0.3% per year during the same period. The smallest gap is observed in Chile, Denmark, Greece and Portugal, where the difference in the annual growth rate was less than 0.5 percentage points.

Definition

In 33 OECD countries, 351 metropolitan areas over half a million inhabitants were identified, according to the EU-OECD method that delineates FUAs by considering densely populated cities together with their commuting zones to reflect the economic geography of the population's daily commuting patterns (see Dijkstra, Poelman and Veneri, 2019, or Annex A for details).

GDP per capita in metropolitan areas above 500 000 inhabitants is modelled from available GDP data at smaller geographies, which are aggregated or adapted to the boundaries of metropolitan areas proportionally to its population, using a population grid. More details are available in Annex C.

Source

OECD (2020), "Metropolitan areas", *OECD Regional Statistics (database)*, OECD, Paris, *http://dx.doi.org/10.1787/data-00531-en*.

Further information

Dijkstra, L., H. Poelman and P. Veneri (2019), "The EU-OECD definition of a functional urban area", *OECD Regional Development Working Papers*, No. 2019/11, OECD P ublishing, Paris, *https://doi.org/10.1787/d58cb34d-en*.

Figure notes

Figure 2.17 to Figure 2.21: Population weighted averages data. 2001-18 period, or 2009-16 (CAN); 2008-17 (CHE); 2008-18 (CHL); 2001-16 (JPN). GDP in constant prices, constant PPPs, OECD reference year.

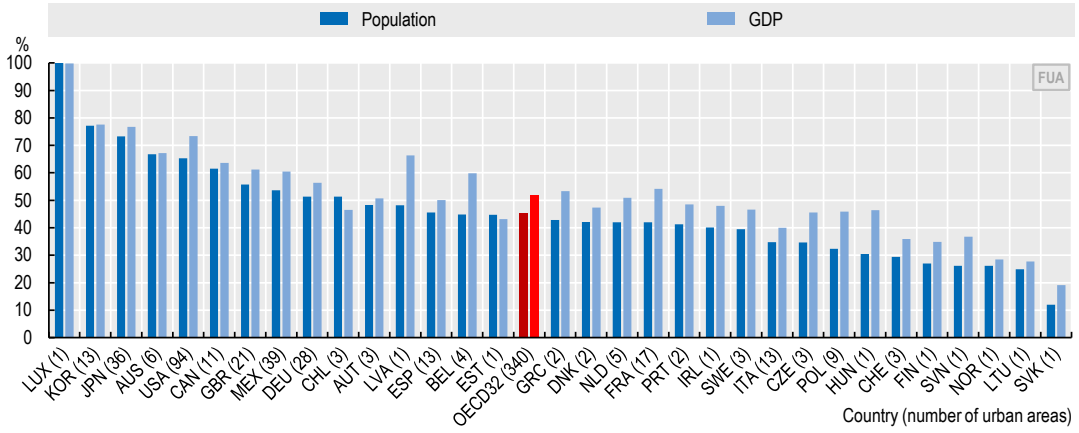
Figure 2.17: Countries ranked by decreasing share of the metropolitan population in the national economy.

Figure 2.18: Countries ranked in descending order of GDP per capita difference between the highest metropolitan and the rest of the economy.

Figure 2.19: Countries ranked according to the difference between growth rate in metropolitan areas and the growth rate in non-metropolitan areas, from the largest difference to the smallest.

2.17. Share of population and GDP in OECD metropolitan areas, 2018

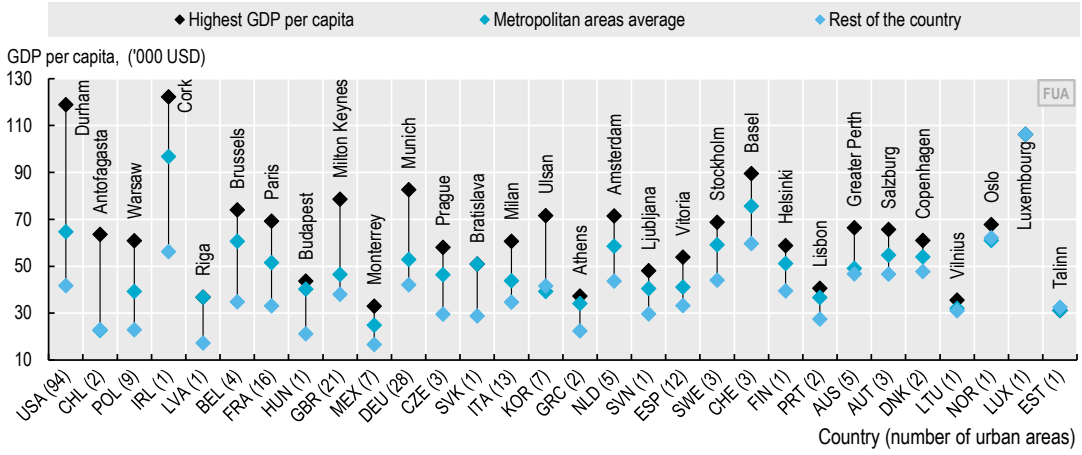
FUAs over 500 000 inhabitants



StatLink https://doi.org/10.1787/888934189887

2.18. GDP per capita levels in metropolitan areas, 2018

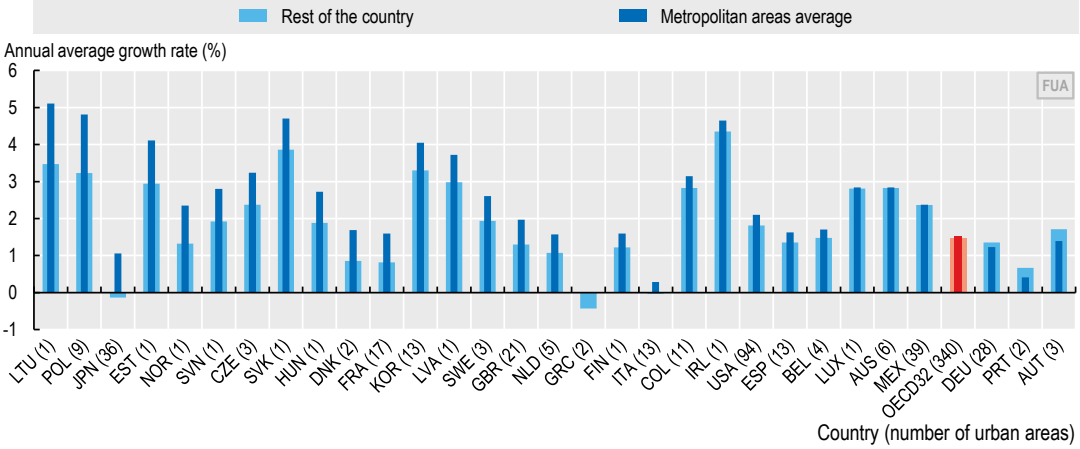
FUAs over 500 000 inhabitants



StatLink https://doi.org/10.1787/888934189906

2.19. GDP growth in metropolitan areas, 2001-18

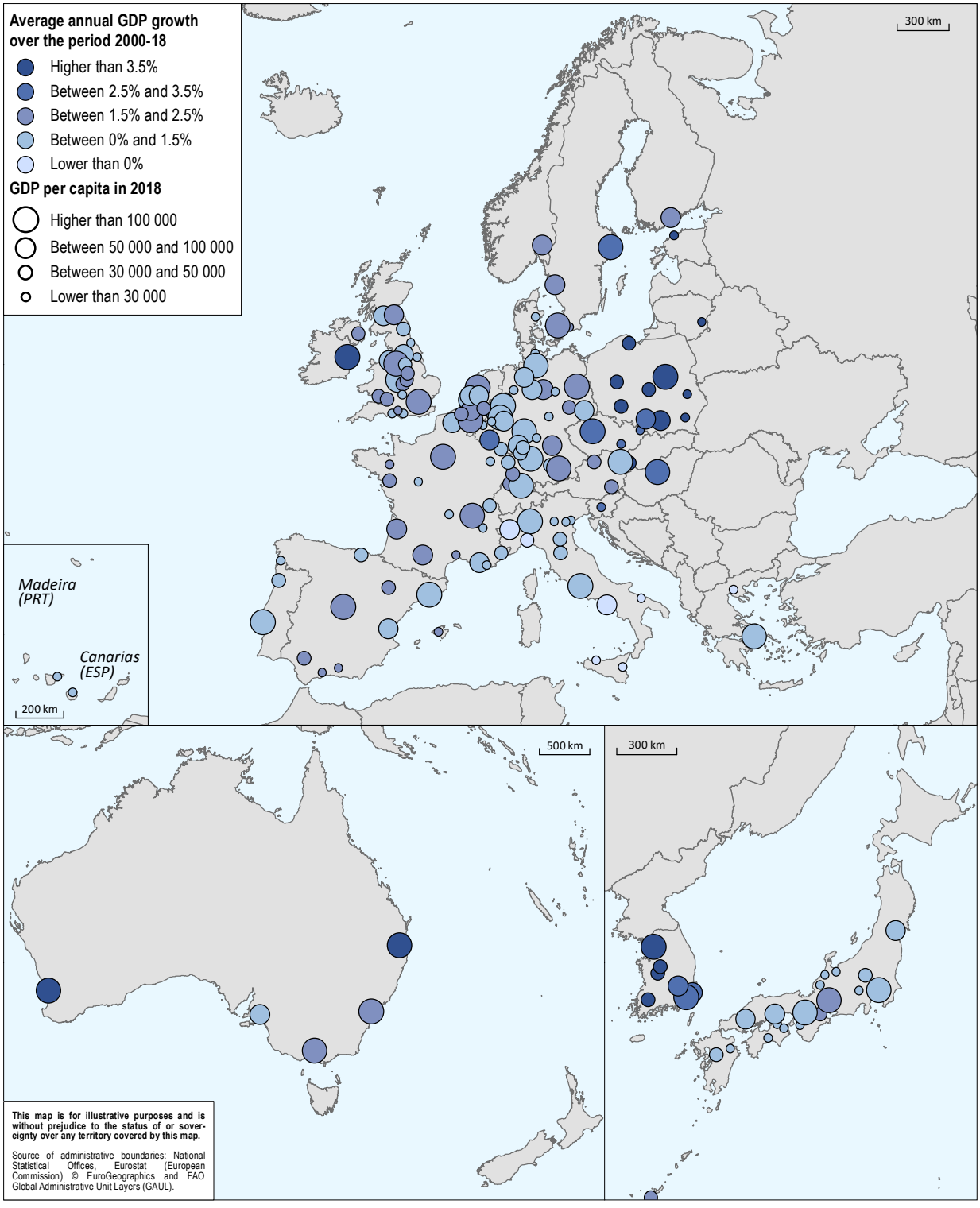
GDP growth rate in FUAs above 500 000 inhabitants



StatLink https://doi.org/10.1787/888934189925

2.20. Metropolitan GDP growth: Asia, Europe and Oceania, 2001-18

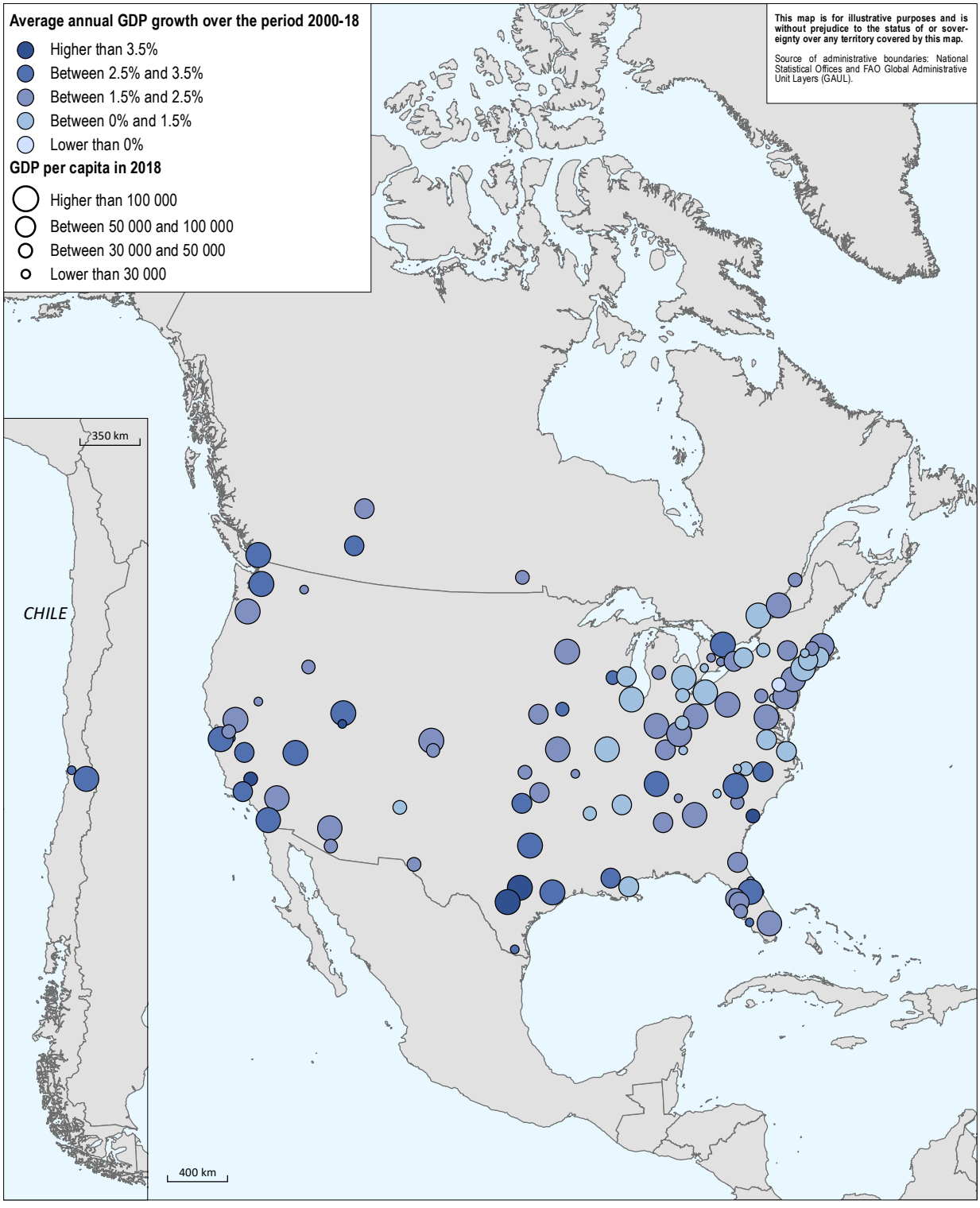
Average annual growth rate, FUAs over 500 000 inhabitants



StatLink https://doi.org/10.1787/888934189944

2.21. Metropolitan GDP growth: Canada and the United States, 2001-18

Average annual growth rate, FUAs over 500 000 inhabitants



StatLink https://doi.org/10.1787/888934189963