

**Regions and Cities at a Glance 2020** provides a comprehensive assessment of how regions and cities across the OECD are progressing in a number of aspects connected to economic development, health, well-being and net zero-carbon transition. In the light of the health crisis caused by the COVID-19 pandemic, the report analyses outcomes and drivers of social, economic and environmental resilience. Consult the full publication <u>here</u>.

## OECD REGIONS AND CITIES AT A GLANCE - COUNTRY NOTE

## HUNGARY

- A. Resilient regional societies
- B. Regional economic disparities and trends in productivity
- C. Well-being in regions
- D. Industrial transition in regions
- E. Transitioning to clean energy in regions
- F. Metropolitan trends in growth and sustainability

The data in this note reflect different subnational geographic levels in OECD countries:

- Regions are classified on two territorial levels reflecting the administrative organisation of countries: large regions (TL2) and small regions (TL3). Small regions are classified according to their access to metropolitan areas (see <u>https://doi.org/10.1787/b902cc00-en</u>).
- Functional urban areas consists of cities defined as densely populated local units with at least 50 000 inhabitants – and adjacent local units connected to the city (commuting zones) in terms of commuting flows (see <u>https://doi.org/10.1787/d58cb34d-en</u>). Metropolitan areas refer to functional urban areas above 250 000 inhabitants.

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### Budapest leads the potential for remote working among all Hungarian regions

The shares of jobs amenable to remote working in the Hungarian regions range from 48% in Budapest to 26% in Central and Western Transdanubia and Northern Hungary (Figure A1). Such a difference depends on the task content of occupations in the regions – which can be amenable to remote working to different extents – and to the weight of the service sector in large metropolitan areas. As for most OECD countries, the occupations available in the capital region tend to be more amenable to remote working than in other regions.

Remote working requires a large part of the population to have access to fast and efficient internet connections. Between 4% and 7% of the buildings in Hungarian regions are connected to optic fiber network, on average, whereas the use of internet through broadband is largely spread over all regions (Figure A2).



#### A2- Internet infrastructure, 2019

Figure [A1]: The lower percentage range (<25%) depicts the bottom quintile among 370 OECD and EU regions, the following ranges are based on increment of 5 percentage points. Further reading: OECD (2020), Capacity to remote working can affect lockdown costs differently across places, <a href="http://www.oecd.org/coronavirus/policy-responses/capacity-for-remote-working-can-affect-lockdown-costs-differently-across-places-0e85740e/">http://www.oecd.org/coronavirus/policy-responses/capacity-for-remote-working-can-affect-lockdown-costs-differently-across-places-0e85740e/</a>

## Ageing challenges metropolitan regions less strongly than other places in Hungary

The elderly dependency rate has increased in all types of regions in Hungary since 2000. Regions far from metropolitan areas in Hungary mimic the average OECD region, with an elderly dependency average rate of 30% in 2019 and an increase of 8 percentage points since 2000 (Figure A3). Metropolitan regions in Hungary have lower elderly dependency rates, although regional differences remain low compared to other OECD countries (Figure A4).



### Hungarian regions have more hospital beds per capita than OECD average

The number of hospital beds per inhabitants has declined in all Hungarian regions between 2000 and 2018, except in North Hungary (Figure A5). The decline was particularly significant in Budapest, although that region, with 10 hospital beds per 1000 inhabitants, has the highest hospital beds availability in the country, and above OECD average.



Figure notes. [A3]: OECD (2019), Classification of small (TL3) regions based on metropolitan population, low density and remoteness https://doi.org/10.1787/b902cc00-en. Two-year moving averages. [A4]: Small (TL3) regions contained in large regions. The 20 TL3 regions in Hungary are composed by 19 counties and Budapest.

## Regional economic gaps in Hungary, already high compared to other OECD countries, have increased moderately since 2000.

Regional disparities in GDP per capita slightly increased in Hungary since 2000, partly as a result of relatively higher growth in Budapest compared to that in other regions (Figure B1). However, the last decade shows signs of regional economic convergence, with higher GDP per capita growth in Győr-Moson-Sopron, Fejér, Komárom and Vas compared to that in Budapest. In 2018, Hungary had the third highest regional disparities in GDP per capita among 29 OECD countries with comparable data.

Productivity growth in Hungarian regions was above the OECD average over the last eighteen years, with growth ranging from 1 % per year in Pest to 2.1% per year in North Hungary. In Budapest, the region with the highest productivity level in Hungary, productivity grew by 1.6% per year over the period 2000-18, a slower pace compared to the North region (Figure B2). The gap in labour productivity between regions far from a metropolitan area of at least 250 000 inhabitants and metropolitan regions has remained stable (Figure B3).



Note: A ratio with a value equal to 2 means that the GDP of the most developed regions accounting for 20% of the national population is twice as high as the GDP of the poorest regions accounting for 20% of the national population.



## Well-being disparities across Hungarian regions are largest in the sense of community, jobs and access to services.



#### C1 Well-being regional gap

Note: Relative ranking of the regions with the best and worst outcomes in the 11 well-being dimensions, with respect to all 440 OECD regions. The eleven dimensions are ordered by decreasing regional disparities in the country. Each well-being dimension is measured by the indicators in the table below.

In four well-being dimensions, regions in the highest 20% of OECD regions coexist with others below the OECD median. The largest well-being disparities across Hungarian regions are found in community (perceived social network support) – where Central Transdanubia is among the top 20% of OECD regions and Budapest in the bottom 10%. All Hungarian regions rank in the bottom 20% of OECD regions in terms of health, with the exception of Budapest (Figure C1). The high performing Hungarian regions fare better than the OECD top 20% regions in terms of unemployment, education and homicide rates (Figure C2).

		Country	OECD Top	Hungarian regions	
		Average	20% regions	Top 20%	Bottom 20%
	Community				
	Perceived social netw ork support (%), 2014-18	86.6	94.1	93.9	78.7
	Jobs				
	Employment rate 15 to 64 years old (%), 2019	70.1	76.0	74.0	65.8
	Unemployment rate 15 to 64 years old (%), 2019	3.5	3.3	1.9	6.0
	Access to services				
	Households with broadband access (%), 2019	83.7	91.3	90.7	78.0
0	Education				
	Population with at least upper secondary education, 25-64 year-olds (%), 2019	85.0	90.3	92.7	79.1
	Safety				
	Homicide Rate (per 100 000 people), 2016-18	0.8	0.7	0.6	1.0
	Life Satisfaction				
	Life satisfaction (scale from 0 to 10), 2014-18	5.6	7.3	6.0	5.3
	Health				
	Life Expectancy at birth (years), 2018	76.1	82.6	78.2	74.9
	Age adjusted mortality rate (per 1 000 people), 2018	11.3	6.6	10.0	12.2
	Civic engagement				
	Voters in last national election (%), 2019 or latest year	61.8	84.2	75.2	66.5
	Environment				
	Level of air pollution in PM 2.5 (µg/m³), 2019	20.3	7.0	14.9	19.5
	Income				
	Disposable income per capita (in USD PPP), 2018	13 239	26 617	15 251	11 487
	Housing				
-	Rooms per person, 2018	1.1	2.3	1.3	1.1

#### C2. How do the top and bottom regions fare on the well-being indicators?

Note: OECD regions refer to the first administrative tier of subnational government (large regions, Territorial Level 2); Hungary is composed of 20 TL2 regions. Visualisation: <u>https://www.oecdregionalwellbeing.org</u>.



### Manufacturing employment has declined in all Hungarian regions since 2000.

Between 2000 and 2018, all large regions in Hungary experienced a decline in the share of manufacturing employment, although a rebound occurred in Northern Hungary where manufacturing employment exceeded 26% in 2018 (Figure D1). In Budapest, the share of manufacturing employment has halved since 2000 (Figures D1 and D2).

Differently from the trends in manufacturing employment, the share of manufacturing gross value-added has increased in four Hungarian regions: Northern Hungary, Central Transdanubia, Southern and Northern Great Plain (Figure D2). In Northern Hungary the share in manufacturing grass value-added increased by 10-percentage points between 2000 and 2018.



#### D2. Manufacturing trends, 2000-18

Figure [D.2]: Regions are ordered by regional employment as a share of national employment. Colour of the bubbles represents the evolution of the share over the period 2000-18 in percentage points: red: below -2 pp; orange: between -2 pp and -1 pp; yellow: between -1 pp and 0; light blue: between 0 and +1 pp; medium blue: between +1 pp and +2 pp; dark blue: above +2 pp over the period.

## Southern Transdanubia – which produces 56% of the electricity in Hungary – has achieved coal-free electricity production

Due to its high reliance on nuclear power, Southern Transdanubia – the largest electricity producer in Hungary – was coal-free in electricity production in 2017. On the other hand, Northern Hungary – which contributed to 21% of the country's electricity production – still highly relied on coal. In 2017, Northern Hungary produced 61% of its electricity using coal. Consequently, electricity production in Northern Hungary emitted significantly higher CO<sub>2</sub> than in Southern Transdanubia, but produced two and a half times less electricity (Figure E1).



#### E1. Transition to renewable energy: electricity production, 2017

Carbon efficiency in the production of electricity is very unequal across Hungarian regions. While Southern Transdanubia emitted less than 16 tons of  $CO_2$  per gigawatt hour of electricity produced in 2017, Northern Hungary released close to 700 tons of  $CO_2$  per gigawatt hour – due to its high reliance on coal. Relative to total national levels, whereas Southern Transdanubia produced 56% of Hungary's electricity and releases only 3% of total  $CO_2$  emissions in the country, Northern Hungary generated only 21% of electricity and released 52% of total  $CO_2$  emissions (Figure E2).



#### E2. Contribution to total CO<sub>2</sub> emissions from electricity production, 2017

Note: Regions are arranged in Figure E1 by total generation, and in Figure E2 according to gap between share of electricity generation and share of CO<sub>2</sub> emissions (most positive to most negative). Only 89% of the total country's electricity production is covered. Electricity production from Biomass, Geothermal, Hydro, Solar, Waste, Wind power plants is missing. These estimates refer to electricity production from the power plants connected to the national power grid, as registered in the Power Plants Database. As a result, small electricity generation facilities disconnected from the national power grid might not be captured. Renewable energy sources include hydropower, geothermal power, biomass, wind, solar, wave and tidal and waste. See <u>here</u> for more details.

# Compared to the OECD average, Hungary has a lower concentration of people in metropolitan areas above half a million inhabitants

In Hungary, 64% of the population lives in cities of at least 50 000 inhabitants and their respective commuting areas (functional urban areas, FUAs). The share of population in FUAs with more than 500 000 people is 30%, half the OECD average (Figure F1).



#### F1. Distribution of population in cities by city size Functional urban areas, 2018

## Built-up area has increased faster than population in the metropolitan area of Budapest

Built-up area per capita in the metropolitan area of Budapest is slightly below the OECD average of metropolitan areas of at least half a million inhabitants and close to the levels observed in Prague (Czech Republic) and Bratislava (Slovak Republic). Between 2000 and 2014, built-up area per capita in the metropolitan area of Budapest has increased (Figure E2).



Source: OECD Metropolitan Database. Number of metropolitan areas with a population of over 500 000: 1 in Hungary compared to 351 in the OECD.

## The metropolitan area of Budapest ranks in the top 10% of OECD metropolitan areas in terms of GDP per capita growth since 2001

GDP per capita levels in the metropolitan area of Budapest are lower than the OECD median of metropolitan areas and lower than in Prague (Czech republic), Vienna (Austria), Bratislava (Slovak Republic) or Ljubljana (Slovenia). However, Budapest GDP per capita growth since 2001 was among the top 10% among OECD metropolitan areas of at least half a million inhabitants (Figure E3).



### | 9