

Megatrends and Implications for Rural Development Policy

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The COVID-19 pandemic has made it clear—even if it was true before—that policies based on restoring the past will not succeed. Too often rural policy has been framed in the context of restoring a world that once was. But coal is not coming back; cut-and-sew textiles are not coming back; a small-town retail sector based on family-owned stores is not coming back; small, community-owned, rural hospitals offering a full spectrum of services are not coming back; nor are many of the ways that people earned their incomes even 10 years ago. While devising a national rural policy is clearly a challenge for the United States, as it is for other Organization for Economic Cooperation and Development (OECD) countries, the only hope for success is to make it forward-looking, so it can help position rural communities, people and firms for future challenges and opportunities. Several megatrends, such as digitalization, globalization, demographic change and climate change, are shaping challenges and opportunities in rural regions.

Recent work by the OECD can help to identify the broad environment in which discussion about a national U.S. rural policy can take place. This chapter provides an overview of rural opportunities and challenges in the 21st century and policy responses for rural regions.

Rural Regions Have Distinct Features

Rural regions share a number of common features and characteristics that shape their development opportunities, business environment and quality of life for residents in ways different from more densely populated metropolitan areas. Policymakers need to understand these differences and tailor policy responses accordingly. A main distinction between the two is the lack of economies of agglomeration in rural regions. The economics literature over the past several decades explains why people and firms tend to cluster in common geographies and shows that over time these places further attract and concentrate more people and firms. Simply put, people like to locate close to firms where more job diversity and opportunities are present,

and in turn, firms like to locate close to consumer markets. This symbiotic relationship gives rise to scale effects and increasing returns to scale, leading to more jobs and higher living standards. It is estimated that, all things equal, doubling the population size of cities would yield productivity gains between 2% and 5%. Indeed, the evidence confirms higher levels of average gross domestic product per capita (GDP pc) and productivity in cities. Densely populated areas, however, must also mitigate a number of associated costs that emerge in agglomerations, including congestion, pollution, noise and higher inequality, among others.

A common feature of rural regions is that they lack the agglomeration benefits and consequently dense internal markets. Hence, they face higher transportation costs to take their goods or services into larger markets elsewhere. Services produced for rural regions in turn must rely on a much smaller market base, and therefore performance highly depends on tradable activities. Rural regions also face higher marginal costs to deliver essential public goods and services, notably education and health. Despite these differences, rural regions have numerous unique assets ranging from natural resources, renewable energy and natural amenities, to unique cultures and histories. When well-managed, these assets can develop a dynamic and competitive business ecosystem. Effective policy response will need to understand and leverage these unique features to make the most of the opportunities that are present in rural regions.

Despite the distinct opportunities and challenges present in rural regions, urban and rural places are both being shaped by various megatrends. These megatrends are broader external structural forces that are shaping and transforming our economies and societies in fundamental ways, notably regarding globalization, digitalization, demographic change and climate change. If they are to have any hope of success, rural policies must consider the effects of these megatrends.

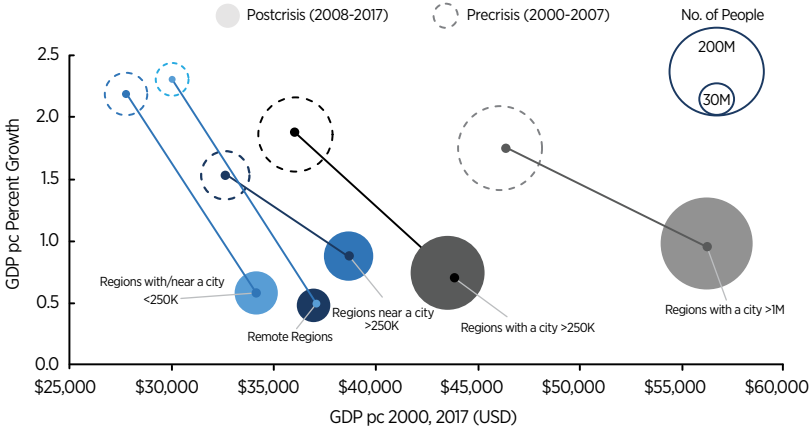
Globalization, Global Value Chains and Growing Gaps

Much has been written about globalization going back to the development of the Silk Road, migration of Europeans to the Americas, and travel and trade patterns by the Vikings during early days. More recently, rural regions have been affected by globalization via the delocalization of

production factors and the emergence of global value chains, in which labor inputs have shifted from developed to emerging economies, driven by international competition. This megatrend has especially affected manufacturing and tradable activities, which have had an especially large impact on many rural regions. In addition, rural regions tend to be more vulnerable to economic shocks, such as the one experienced during the 2008 global financial crisis, because of their less-diversified economic base when compared to that of large cities.

As a result, it is no surprise that since 2008 there has been a growing gap in population when comparing large cities and their surrounding regions to remote rural areas and those close to small and medium-sized cities. (See Figure 1.)

FIGURE 1
The Global Financial Crisis Brought Convergence to a Halt
 Size of Bubble Proportional to Population in the Initial and Final Years



SOURCE: OECD Rural Studies, *Rural Well-Being: Geography of Opportunities* (2020);¹
 NOTES: 2017 extrapolated values for France and Japan based on 2001-16 regional growth rates. Based on available data for 1,530 TL3 regions in 28 countries. GDP is in U.S. dollar purchasing power parities with the base year 2015.

The growing divide is not only economic but also cultural, sociological and, in many countries, political. Simply put, inhabitants of rural regions feel that the opportunities brought by globalization have not reached their communities.

Although many uncertainties exist regarding the effects of the COVID-19 pandemic, there is a risk that these disparities could deepen if emergency measures and recovery plans do not address rural needs. Of particular concern is the fact that many rural regions are home to large populations that have been vulnerable to COVID-19, including a higher share of the population that is elderly or obese. In addition, rural places often have less capacity to deliver health services. Besides the health effects, inhabitants in rural regions have a smaller share of jobs that can be conducted through teleworking and hence have been more disrupted by the confinement measures implemented in many countries.

Despite these associated challenges, the COVID-19 pandemic can bring many positive effects to rural regions. A greater adoption of remote working could incentivize the demand for places outside large cities to offer affordable and suitable housing and office spaces with better access to environmental amenities. Many of these locations, however, will likely be close to cities, which will remain important hubs of opportunities. An acceleration of digitalization can also strengthen the competitiveness of rural small to medium-sized enterprises (SMEs) and entrepreneurs, and deliver services at lower costs and higher quality.

These two factors—remote working and digitalization—with the right set of policy responses, can bring new opportunities for rural business, attract highly skilled workers and improve the attractiveness of rural regions. Policy responses to mitigate the growing population gap will need to improve the following:

- Broadband access and affordability—this involves implementing holistic policies to foster competition in communication markets, simplifying procedures for broadband deployment, and creating funding methods to increase connectivity; for example, demanding aggregation models, public-private partnerships, public funding to expand connectivity, coverage obligation in spectrum auctions and bottom-up approaches, and addressing the last mile.²
- Investment in digital skills for workers, and information and communications technology (ICT) capacity for firms, especially SMEs—this includes implementing training on basic use of ICT and computing, and capacity-building on software and ICT maintenance in rural economies.

- The quality of education and health services outside large cities, by addressing gaps in provisions that lower the attractiveness of some rural regions.
 - o For education, this includes developing school clusters or networks in which schools formally cooperate under a single leadership to allocate resources more flexibly and efficiently, as well as introducing more-flexible approaches to considering class sizes and other relevant regulations.³
 - o On health, this includes providing incentives for the establishment of multidisciplinary health centers and reinforcing primary and integrated care provisions (which are generally the first contact point for the majority of patients' needs outside of large cities). Policies to attract, retain and empower health workers should also be bolstered.⁴
- Multilevel governance (the relationship between the federal, state and local governments).

Demographic Trends and Their Implications for Policy Responses

Although demographic patterns across OECD countries are relatively stable, those countries are experiencing several long-term patterns. Populations have been aging and gradually concentrating in geographies home to large cities. These transformations will likely continue in the coming years, although recent changes in teleworking brought on by COVID-19 could alter these patterns.

It is likely that there will continue to be a gradual concentration toward urban areas, specifically in what the OECD calls functional urban areas (FUAs). For example, the share of the population living in FUAs globally increased from 2.1 billion (or 51.5% of the world population) to 4.9 billion (53.7%) between 1975 and 2015. In turn, rural regions have been losing their relative population shares. Recent analysis, using a revised definition of small regions (Territorial Level 3 OECD regions; see Appendix), shows that in all countries except one (Greece), the share of population living in metropolitan regions increased since 1990 against a fall in nonmetropolitan regions.

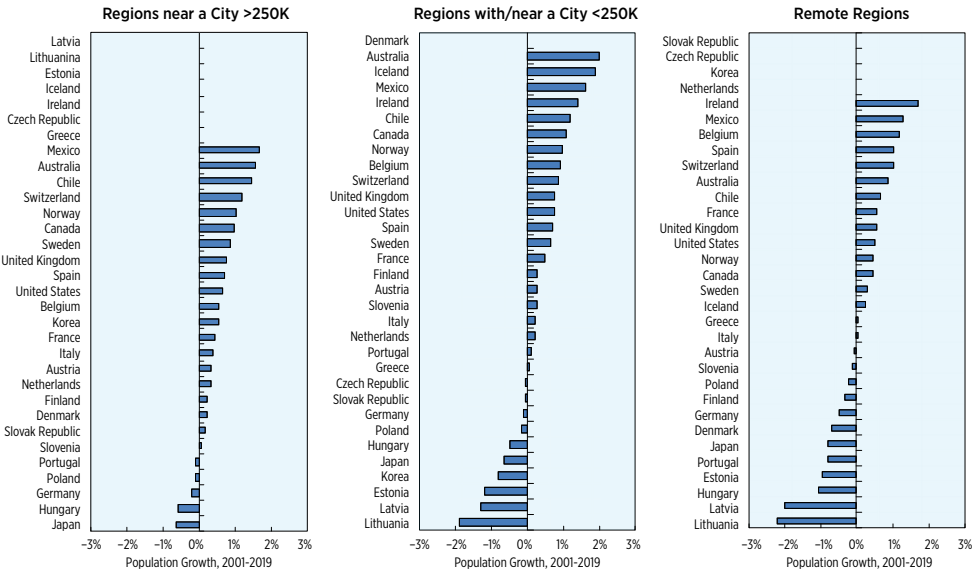
It is interesting to note that countries with both lower incomes (e.g., Estonia, Lithuania and Hungary) and higher incomes (e.g., Finland, Canada,

Norway and Sweden) are experiencing high growth in the share of the population living in metropolitan regions.

Outside metro regions, rural regions—those close to medium and small cities—and remote regions are facing greater demographic pressures than regions close to larger cities (see Figure 2). Between 2001 and 2019, 12 OECD countries experienced population declines in remote regions, and eight had declines in regions close to medium and small cities, but only five had declines in nonmetropolitan regions close to large cities.

FIGURE 2
**Population Growth in Regions Near Large Cities
 over the Last Two Decades**

Population Growth Rates 2001-19



SOURCE: OECD Rural Studies, *Rural Well-Being: Geography of Opportunities* (2020).⁵

Aging is also a stronger structural phenomenon in rural regions vis-à-vis metropolitan regions. In all but one OECD country (Poland), aging dependency ratios—the ratio of the population over age 65 to the working-age population—are higher in rural regions compared to those in metropolitan

regions. In the large majority of countries (27 out of 31 countries with available data), the aging dependency ratio is higher in rural regions by at least 1 percentage point. The countries with the largest gap in elderly dependency ratios in 2019 include Japan, Finland, Australia, the United Kingdom, Sweden, Canada and Korea—all with a gap above 9 percentage points.

In sum, rural regions are facing stronger demographic pressures than urban regions, especially in remote places and in those close to small and medium-sized cities. Policy responses will need to:

- Shift from reactionary measures—such as keeping places “afloat,” which has not worked well in the past—toward policies that are anticipatory and deliver services that are fit for future demographic scenarios.
- Ensure sustainability, take advantage of digitalization and technologies, and coordinate well with other measures that can improve the attractiveness of rural places.
- Go beyond commodity-based responses (agriculture, energy) and focus on the well-being of people and rural communities.
- Provide holistic approaches that target enabling factors of development such as education and infrastructure—especially those related to technology and innovation that can support rural small and medium-sized enterprises and entrepreneurs aligned with the provision of essential services including health.
- Leverage economies of scale and scope, such as school networks and multidisciplinary health services in rural regions, or utilize primary and secondary educational facilities to teach digital skills to adult and elderly populations.

Rural Regions Need to Be Active Players in the Transition to a Low-Carbon Economy

Climate change is around the corner, and the transformations it will produce are unprecedented. A rise in temperature levels by 2 degrees Celsius will raise sea levels along coastlines, change tourism destinations and affect agricultural production, just to name a few. Policy responses will need to focus on adapting to these changes and transitioning to a low-carbon economy.

Cities, which contribute to around 80% of global carbon dioxide emissions, have played an important role in accelerating the transition to a low-carbon economy, putting in place aggressive measures to mitigate CO₂ emissions, including efforts to promote green mobility options, zero-energy buildings and a circular economy. Rural regions also have an essential role in the transition to a low-carbon economy. They cover roughly 80% of territory in OECD countries, contain natural resources, and offer biodiversity and ecosystem services needed to sustain our lives. They produce food and energy, clean the air, detoxify waste, clear the water and sequester carbon.

The transition to a low-carbon economy will undoubtedly bring a number of challenges to our economies and local communities given the transformations it will bring. Nonetheless, rural regions are well-placed to take advantage of a wide range of opportunities. There is potential for rural regions to attract investment and increase economic activity, while safeguarding the natural environment and reducing emissions. This includes the “reshoring” of some manufacturing activities and the potential to make and develop new technologies. This can happen in a range of different areas. For example, developing a circular and bioeconomy could create new business or employment opportunities in the ecosystem services industry, and royalty income in renewable energy production.

Rather than isolated actions, integrated and holistic policy approaches at the subnational level are needed to coordinate push-and-pull factors and reinforce the impact of different actions and address trade-offs. A place-based approach in rural communities reflecting local circumstances and geographic location can accelerate the opportunities related to climate change.

The following are key areas to accelerate in rural regions:

- Protecting natural amenity areas with rich biodiversity, and promoting the valorization of ecosystem services.
- Making the most of the potential of renewable energies by enhancing innovation and technological advancements to increase their competitiveness with respect to carbon-intensive energy sources and to improve storage capacity of things such as hydro fuels.
- Promoting the shift to the circular economy by exploring new business models and supporting urban-rural linkages.

- Coordinating transportation, land-use and spatial planning to ensure environmentally friendly commuting patterns, with the expected expansion of local labor market areas brought by higher rates of teleworking.
- Contributing to decarbonizing transportation and decreasing high car dependence in rural regions by accelerating the transition with infrastructure, smartly connected to the variable production of renewable electricity, and accelerating green hydrogen production to contribute to zero-emissions heavy-road transport.

Conclusion

Rural communities face a number of opportunities and challenges brought by globalization, demographic change and climate change. Rural policies will need to be forward-looking, going beyond a four- to five-year policy cycle to ensure they can take into account long-term demographic scenarios and understand the opportunities brought by climate change and globalization. Rural policies also need to be holistic and target the well-being of citizens living in rural places. This means going beyond a traditional narrow focus on agriculture and other commodities, to improve the services available in rural regions in ways that can improve their attractiveness and enhance the conditions needed for robust development. Digital infrastructure and digital skills will be critical conditions for growth in the post-COVID-19 economy. Rural policies will also need to take into account the diversity of rural regions and recognize that their relative linkages and accessibility to cities will necessitate different policy responses. To this end, many countries across the OECD are implementing the rural policy framework *Rural Well-Being: Geography of Opportunities* through the OECD Principles on Rural Policy. The OECD welcomes the opportunity to continue its engagement with the U.S. to help ensure that its rural communities are able to thrive and prosper.

Appendix: A Typology of Territorial Level 3 (TL3) Regions Based on Their Levels of Access to Cities of Different Sizes⁶

The first tier of a TL3 (small) region adopts as its threshold that 50% of its population lives in an FUA of at least 250,000 people; the second tier uses a 60-minute driving-time threshold, a measure of the access to an FUA.

The new methodology classifies TL3 regions into metropolitan and non-metropolitan according to the following criteria:

Metropolitan TL3 region when more than 50% of its population lives in an FUA of at least 250,000 inhabitants. Metropolitan regions are further classified into:

- **Large metropolitan TL3 region** when more than 50% of its population lives in an FUA of at least 1.5 million inhabitants.
- **Metropolitan TL3 region when the TL3 region is not a large metropolitan region** and 50% of its population lives in an FUA of at least 250,000 inhabitants.

Nonmetropolitan TL3 region when less than 50% of its population lives in an FUA. These regions are further classified according to their levels of access to FUAs of different sizes:

- **Region with access to (near) a metropolitan TL3 region** when more than 50% of its population lives within a 60-minute drive from a metropolitan area (an FUA with more than 250,000 people); or when the TL3 region contains more than 80% of the area of an FUA of at least 250,000 inhabitants.
- **Region with access to (near) a small/medium TL3 region** when the TL3 region does not have access to a metropolitan area and 50% of its population has access to a small or medium city (an FUA of more than 50,000 and less than 250,000 inhabitants) within a 60-minute drive; or when the TL3 region contains more than 80% of the area of a small or medium city.
- **Remote TL3 region when the TL3 region is not classified as a nonmetropolitan region near a large city or small or medium city; i.e.,** when 50% of its population does not have access to any FUA within a 60-minute drive.

References

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Endnotes

- ¹ See OECD, 2020.
- ² See OECD, 2018.
- ³ See OECD, 2021.
- ⁴ Ibid.
- ⁵ See OECD, 2020.
- ⁶ See Fadic et al.

