

## Regions in a time of pandemic

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This blog is based on the last editorial of *Regional Studies* "[Regions in a time of pandemic](#)" (Bailey et al., 2020) which considers some relevant regional dimensions of the Covid-19 pandemic and some potential avenues for research in the topic.

The virus's impact has been **unevenly distributed geographically**, and it is also expected that the current economic crisis will have a more considerable variation within countries than between them. In Europe, a small fraction of the 500 NUTS-3 regions accounts for a majority of Covid-19 deaths (Guibourg, 2020). Examples of this sub-national dispersion can be found in Italy or the United States. In Italy, Lombardy has reached almost 50% of the total national cases ([Ministerio della Salute, 2020](#)). In the United States, New York, and New Jersey have been the areas more affected from 2000 deaths per 100,000 inhabitants to only 60 in Hawaii ([Coronavirus Resource Centre, 2020](#)). The pandemic has affected diverse geographical areas from dense urban places to smaller cities in a rural environment where "superspreading" events have occurred, and these seem to be the ones that have experienced the highest number per capita (see Kuebart and Stabler, 2020 for the German case).

The **economic impacts of the pandemic** are also be seen uneven at the regional level ([KPMG, 2020](#)) mainly linked with the regional industrial composition and general regional conditions (see Ascani, 2020 for the Italian case). Regions heavily reliant on tourism are expected to be amongst the most economically affected. The current crisis, then, is undoubtedly a regional one, with significant consequences for economies, well-being, transportation and everyday life and with a call for place-based and place-sensitive policies. It is expected that the pandemic will exacerbate the trends seen over the past 40 years on **intra- and interregional inequality**. In particular, evidence suggests that the virus has disproportionately affected the lives of people living in disadvantaged locations and conditions (Williamson et al., 2020).

The timing of **policy responses** has also had a substantial effect on the uneven regional distribution of the Covid-19 crisis. The OECD has produced six comprehensive briefings on policy responses on the topics of cities, small and medium-sized enterprises (SMEs), tourism, rural development, and the territorial and multilevel governance impacts and challenges of Covid-19 (OECD 2020a, 2020b, 2020c, 2020d, 2020e, 2020f).

**The spatial-industrial organisation of value chains.** There is a big debate, linked to the theories on global production networks and "strategic coupling" and the role of proximity versus distance, around how the pandemic may potentially impact the location/geography of logistics/distribution and production processes (value-chain spatialities). The pandemic has had a severe effect on the most

sophisticated value-chains such as in the automotive and aerospace industries. Given the mobility restrictions and the need to be closer to the markets and in order to increase value-chain resilience against a potential logistic interruption, locations (sub-urban areas) that have been mainly specialised in logistics may eventually be transformed into new locations of localised manufacturing. These potential new trends in value-chain spatialities are seen to be heavily influenced by the role of regional, industrial and firm institutional and governance structures. The role of knowledge and governance may have increased in importance during these last months, in that the role of online communication and “open innovation”, “open science” and “open strategy” may have changed the way that proximity is understood as it becomes more virtual, temporary and network-based.

The opportunities and challenges associated with the ‘**Fourth Industrial Revolution**’ driven by advances in automation, robotisation, sensors, drones, artificial intelligence, were already being widely discussed prior to the Covid-19 crisis, and how the crisis will have impacted on these issues is as yet unclear. On the one hand, many of these technologies allow production to continue without the need for social distancing restrictions, so this may accelerate their take-up in industry. On the other hand, the financial implications of the crisis may mean that firms are unable to finance these sorts of investments, and their adoption and implementation may move down the list of immediate priorities. Given the fact that East Asian economies such as China, Japan and Korea lead in their adoption of these technologies, along with the fact that their Covid-19 related contractions have been much less severe than those in Europe, could lead to many European economies falling even further behind their Asian competitors in these new technologies. The regions most affected by these trends will be those in which the affected sectors are mainly located.

In terms of **knowledge and investment**, the greater focus on the development of vaccines and medical advances may favour certain regions over others, especially if public funding is shifted away from other activities. In particular, such activities already tend to be located in the more prosperous regions, so this may accentuate existing inequalities. Local economic growth often displays evolutionary features, dependent on existing spatial patterns of investments and skills. If there are shifts in the relative prioritisation of certain technologies over others, then this will also impact on the growth potential of different regions. In addition, social distancing measures will also limit the extent to which agglomeration effects associated with frequent face-to-face interactions operate.

In terms of **environmental issues**, the lockdown has produced some temporary positive effects in terms of reduced carbon emissions and energy demand. Yet, the longer-term effects of the Covid-19 crisis on the environment are unclear. These depend on how profound are the changes in individual, household and firm behaviour regarding, for example, employment commuting versus working from home, and also whether or not public policy prioritises sustainability in the recovery process. In recent months, web-based interactions have now become an integral part of how the whole of the global economy operates in a way that was not the case prior to the Covid-19 lockdowns. Some aspects of these changes in behaviour may become permanent, and these, in turn, may partially reshape the role of cities as centres of knowledge generation. The organisation of cities may also shift permanently towards cycle-based and pedestrian mobility, but the effects on public versus private transport are as yet unclear. Until a vaccine is found, public transport may continue to be under-utilised, and car transport may be over-utilised. How these balances will resolve themselves are still unknown.

This [article](#) does provide a good roadmap for policymakers and businesses in the West Midlands of the things that we have to consider. There is a real need to understand the extent to which many of the behavioural shocks here exposed are temporary or permanent and how they may change how the city functions and also the relationships between larger cities and more peripheral areas evolve.

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