

# THE REGIONAL CHALLENGES IN THE POST-COVID ERA

edited by  
Annalisa Caloffi, Marusca De Castris,  
Giovanni Perucca



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## Introduction

*Annalisa Caloffi\**, *Marusca De Castris*<sup>°</sup>, *Giovanni Perucca*<sup>§</sup>

### 1. The Regional Challenges in the post-COVID Era

In September 2021, about one year and a half after the spread of the COVID-19 pandemic, emergency and uncertainty gave way to a somehow normalized scenario, in which the communities of researchers, from any discipline, started intensively interrogating themselves on the long-term consequences, issues and challenges imposed by the coronavirus global emergency. The XLII AISRe Conference, held online between 8 and 10 September 2021, called the Italian community of regional and urban scientists to engage on this topic. The title of the conference – “Territorial challenges in the post-COVID era” – perfectly mirrors its main focus.

These challenges concern, in the first place, the asymmetric consequences of the pandemic across places and within societies. In fact, in a world already characterized by increasing social inequalities, the pandemic is likely to exacerbate the rise of disparities. Limited mobility, the restricted access to public services such as schools and hospitals, and the higher uncertainty generated by the sanitary emergency hit more severely those individuals in a condition of relative economic, occupational, and educational disadvantage.

The territorial implications of these phenomena are extremely relevant, and still understudied. They mainly concern two dimensions.

The first one refers to the differentiated impact of the pandemic on the inequalities *across places*. The effects of the healthcare crisis, and consequently the capacity to recover from such exogenous shock, is presumably associated to the

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\* University of Florence, Department of Economics and Management, Florence, Italy, e-mail: [annalisa.caloffi@unifi.it](mailto:annalisa.caloffi@unifi.it).

° Roma Tre University, Department of Political Studies, Roma, Italy, e-mail: [marusca.decastris@uniroma3.it](mailto:marusca.decastris@uniroma3.it).

§ Politecnico di Milano, Department of Architecture, Built Environment and Construction Engineering, Milano, Italy, e-mail: [giovanni.perucca@polimi.it](mailto:giovanni.perucca@polimi.it).

level of exposure of places, in terms of population concentration and fragility. Moreover, understanding how and why any long-term effect of the pandemic may (or may not) structurally change the urban-rural relationship is a challenging issue for regional and urban scientists.

The second dimension of the territorial implications concerns the differentiated impact of the pandemic on the inequalities *within places*. Large cities, in particular, are the settings with the most intense disparities, and where a further broadening of the gap between individuals at the top of the social scale and those at the bottom is more likely to translate into discontent and social conflict.

The effect of the COVID-19 pandemic on inequalities cumulates with the one of other deep socioeconomic transformations, as those induced in the production sector and job market by the rise of the Industry 4.0 paradigm.

In such framework, the role of public policies becomes fundamental, in order to mitigate the undesired effects of these phenomena and to amplify the positive ones. The funding program Next Generation EU represents therefore a unique opportunity for addressing all these issues. Again, the community of regional and urban scientists, and its long stream of research on local policy modeling and evaluation, could provide extremely important indications to policy makers and to society as a whole.

The present book collects a selection of the many interesting studies, presented during the XLII AISRe Conference, that were devoted to the abovementioned issues. More in details, the book is structured into three parts. The first section supplies fresh evidence on the levels and trends of socioeconomic disparities across and within regions. The second section investigates the determinants of these trends, pointing in particular to the role of the unprecedented transformations occurring in the economic structure and job markets of regions and cities. Finally, the third section of the book focuses on the policy tools to face the challenges emerged in the previous discussion.

Taken together, the three sections are aimed at providing a detailed and, as far as possible, complete picture of the state and evolution of regional and urban inequalities during the COVID-19 crisis, jointly with implications and insights for future policies. The rest of the present introduction summarizes the main message and novelties of the studies included in each of the three parts.

## **2. Dimensions of Socioeconomic Disparities: Evidence and Trends across and within Regions**

The study of inequalities has to deal with the multifaceted nature of disparities. The latter may concern several different societal aspects and domains, from the strictly economic ones to those more related to the perceived wellbeing of

individuals. The contributions collected in this chapter are aimed at covering different dimensions of socioeconomic disparities, discussing their evolution both across and within places.

The first study, by Ballabio and Tucci, focuses on the impact of the COVID-19 pandemic on poverty risks. Using data from the Extraordinary Survey of Italian Households (ESIH), collected by the Bank of Italy between 2020 and 2021, the findings of this study clearly show a highly asymmetric increase of poverty risks across the population. In particular, the analysis points to two important results. First, the sanitary emergency broadened inequalities, since the most affected households are those that were (or felt) already poor before the pandemic. Second, space and urbanization are not neutral in mediating the effects of the pandemic, since individuals living in small and medium municipalities in Northern and Central areas are the most affected by income reduction.

Hence, this evidence suggests a generalized increase in economic inequalities within the society but, at the same time, a territorial imbalance which is not consistent with the traditional North-South divide but, rather, favors large cities over less urbanized areas.

The relationship between urban and rural settings is the focus of the second contribution, by Agnoletti *et al.* Their study stems from the recognition that some of the changes in individuals' behaviors imposed by the COVID-19 pandemic may translate into a structural rearrangement of the relationship between urban and rural environments. In particular, the lockdown generated a profound crisis for certain businesses, above all tertiary activities that rely on people's mobility, while, at the same time, promoted the spread of other activities that were somewhat underdeveloped before, such as smart working, e-commerce and distance learning. Whether or not cities will structurally change, at least to some extent, their functional configuration, is certainly one of the most challenging research questions. This chapter tackles this topic, providing an in-depth analysis of the locational choices in Tuscany.

Their findings show that the reduced need of mobility is leading to suburbanization processes. As discussed by the authors, these processes are posing several implications in terms of inequality, especially from what concerns the accessibility to primary services like schooling and healthcare, that are still clustered into large cities.

While the first two contributions addressed the issue of spatial inequalities using objective measures of wellbeing, the study by Alsayed *et al.*, analyses this topic through the lenses of individuals' perceptions. More in details, they adopt a novel methodological approach, performing a text analysis on the Twitter messages collected between October 2020 and March 2021. One of the interesting results of their analysis points, again, to an urban-rural divide in individuals'

perceptions. This time, however, the divide is in favor of less urbanized settings, which are characterized, on average, by a higher share of individuals with positive perceptions compared with those living in cities.

Even if this evidence might seem at odds with the results from the previous contributions, it is fully consistent with the broad literature on the so-called urban paradox in subjective wellbeing, associating urban settings with the higher levels of perceived discontent. Rather, these findings suggest, once more, that objective and subjective wellbeing are determined, at least in part, by different mechanisms, still mostly unknown and deserving further research.

The last contribution of this section, by Lelo and Risi, adopts a different, within-city perspective, as it focuses on a single metropolitan area, Rome. This study analyzes the physical urban dimension of the city of Rome – heavily influenced by the phenomenon of illegal housing expansion – linking it to the economic and social environment, highlighting the structural inequalities that citizens experience, jointly with their evolution in recent times and during the COVID-19 pandemic. The findings show that, in spite of the economic growth experienced in the recent past, the urban system failed in rebalancing historical inequalities and territorial polarizations which, in the aftermath of the pandemic crisis, even exacerbated. These processes generated dynamic and depressed areas, which do not necessarily respond to the usual center-periphery paradigm. The complex picture showed by the authors highlights relatively dynamic areas located on the margins of the city, in spite of the physical isolation and the structural lack of services, so as central areas that did not experience any real development, despite their social characteristics and urban amenities.

This work confirms that the study of inequalities cannot simply rely on an urban-rural divide. Within large cities, in particular, the gap in the living conditions and opportunities of individuals from different social groups is significant and increasing over time. The measurement and implications of this phenomenon are certainly a stimulating issue for the community of regional and urban scientists.

### **3. Drivers of Regional Inequalities and Disparities**

The second section of the book is aimed at identifying the drivers of the inequalities identified in the previous part.

The first study, by Capello and Lenzi, identifies in the Industry 4.0 technological revolution one of the main factors that amplified the differences in economic growth across regions. By investigating, both conceptually and empirically, the impact of the technological transformations enabled by Industry 4.0 on regional economic growth, they show highly differentiated results. The study suggests

that the adoption of the technologies underpinning these transformations positively affects regional growth but with differences across space, according to the degree of penetration of these technologies. More precisely, the authors show that the adoption of automation technologies in transformative manufacturing sectors deliver unbalanced growth advantages across regions, favoring in some cases those regions most prone to the most advanced manufacturing transformation. This, in turn, may lead to a widening of existing disparities and gaps in technology adoption.

This evidence suggests that, apart from the contingent scenario related to the COVID-19 pandemic, other processes of socioeconomic transformation are at work, and their positive effects on economic growth may come at the expenses of higher inequalities.

The second study of this section, by Monti *et al.*, provides an interpretative analysis of the regional resilience in Italy during the COVID-19 pandemic. The aim of the study is to demonstrate how some structural characteristics of regions played an important role in the recovery from the exogenous shock. Among these characteristics, and consistently with the previous chapter, innovation proved to be an important source of resilience, since regions with more advanced productive structures in terms of ICT and R&D underwent less disrupting effects and recovered from the crisis more quickly. Moreover, they show how the pandemic impacted more severely on industry than services but, at the same time, a greater industrial specialization favoured the regional GDP rebound in 2021. Finally, international openness and integration in GVCs involved a sharper fall of regional GDP in 2020 but also a greater capability to recover from the crisis in 2021.

The results from this study imply that the territory is an important mediator of the effects of an exogenous shock. Moreover, the same elements that make a territory more fragile and exposed to shocks in the short term, such as trade and economic specialization, are in several cases also the determinants of a faster recovery. This suggests that a full balance of the effects of the COVID-19 crisis still needs research, and cannot be restricted to the short period.

The study by Faraci *et al.* focuses on the labor market, which is undergoing huge transformations, due to both the Industry 4.0 technological revolution, which introduces labor-saving innovations, and the COVID-19 pandemic, with a transition towards remote working. In this work, the authors examine the regional effects of public spending on active labor market policies. Using an unbalanced sample of 308 regions belonging to 29 OECD Economies, they show that discretionary increases in public spending on active labor market policies at the national level have statistically significant short- and medium-term effect in reducing regional unemployment rate, while raising regional output. Moreover,

these effects tend to be larger during periods of low GDP growth, and when complemented by a larger share of cohesion fund expenditures.

This study sheds light on the role of policies in mitigating the effect of adverse events on socioeconomic inequalities. Moreover, it is worth noting that the beneficial impact of policies on unemployment, are not necessarily counterbalanced by a reduction of regional output.

On a similar vein, the contribution by Santandrea *et al.*, is also focused on public policies, but this time aimed at promoting the productive environment and, more specifically, innovative start-ups, large companies and SMEs in Apulia. The authors present a detailed spatial analysis of the location of firms and of the extent to which they benefited of different funding programs. This study shows a higher concentration of public funding in those areas where there are already firms with high and medium-high technological and knowledge intensity. However, this evidence does not hold across all the funding programs considered by the study.

This work complements the previous one. Taken together, they provide interesting insights on the complex ways in which public policies, with different objectives and priorities, generate different effects on inequalities. Policies aimed at promoting inclusion in the job market, as discussed by Faraci *et al.*, may reduce disparities, without being necessarily detrimental for economic growth. Those aimed at fostering the efficiency of the productive environment, as showed by Santandrea *et al.*, under certain conditions could be territorially widespread, preventing the increase of territorial imbalances and inequalities.

#### **4. Policies and Disparities in the Post-COVID Era**

The last section of the book looks at the future. The European Commission launched, in May 2020, the Recovery Plan for Europe, now referred to as Next Generation EU (NGEU). This massive program of public funding is likely to affect the development of EU regions for the next decade. Therefore, it is important to understand the opportunities offered by the funding program and, at the same time, learning from the past and from the most virtuous and least satisfactory experiences.

This approach is the one followed by Conte and Molica, who discuss the axes of intervention and priorities of the NGEU program, jointly with a retrospective analysis of the impact of the European Regional Development Fund (ERDF) in Italy between 2014 and 2019. Their results indicate that a decentralized governance and a strong place-based logic are critical – at least in the case of Italy – to achieve in the future more efficiency in spending of European funds.

The territory is therefore identified as an important dimension to be considered, in order to maximize the impact of policies.

Viesti provides a detailed territorial analysis of the NGEU plan for Italy, outlining its general features and its potential impacts on the regions, with particular emphasis on Southern Italy. He points to the absence, in the Plan designed by the national government, of territorial indications for the allocation of public funding, in particular for industrial policy measures and for the Transition 4.0 axis. This implies the risk of concentrating new investments where there is already a stronger fabric of businesses, thus increasing territorial inequalities within the country, and in particular between the South and the rest of Italy. Moreover, he stresses the important role will be played by municipal administration in the planning and execution of interventions. Unfortunately, administrations face a shortage of qualified personnel to plan and execute intervention plans. This shortage is found throughout the country but is particularly pronounced in the southern regions.

Another major critical issue in the plan concerns the infrastructure endowment, which is already characterized by large territorial gaps that are likely to widen in the absence of clear policy direction aimed toward reducing inequalities. 3714. Finally, Torselli shifts the attention to a lower territorial level, discussing the effects of the COVID-19 pandemic in reorienting the ERDF Regional Operative Programs (ROPs). The study shows an increase of the funding devoted to the productive environment, jointly with a decrease in specific fields of intervention, such as R&D and innovation. The author documents how the use of “ordinary” European funds to buffer the “extraordinary” emergency has been particularly important. However, he stresses that the challenge for the next timeframe of European fund programming is to move out of the emergency phase and invest the many available resources wisely, avoiding excessive fragmentation and valuing the principle of additionality of EU resources.