Regional Impacts of Covid-19 in Europe: The Costs of the New Normality

Roberta Capello, Andrea Caragliu**

Abstract

This paper discusses the effects of the Covid-19 pandemic on growth of European regions. The impact is measured as a difference between a "New Normality" scenario, imposed by Covid, for the period 2021-2030 and a Reference scenario, whereby Covid-19 did not take place. Scenarios are obtained through the MAcroeconomic, Sectoral, Social, Territorial (MASST4), built by the authors, and able to generate regional growth scenarios for regions (NUTS2) in EU member states (UK included) on the basis of the interaction bewteen macroeconomic elements and local specificities. Some EU Countries and regions will actually be capable of bouncing back and show remarkable resilience. Other regions, instead, register a high cost in terms of missed growth.

1. Introduction[1]

The recent and largely unexpected pandemic of Corona-19 virus has caught healthcare systems all over the world unprepared, thus exerting a dramatic toll in terms of both casualties as well as in terms of missed economic performance, mostly because of the lockdown measures enacted in many Countries to prevent the diffusion of the contagion.

While countless attempts at gauging the extent of the slump caused by the pandemic have been made over the past few months, the absence of reliable real-time economic statistics and the limited availability of regional macroeconometric growth models have to date yielded scarce evidence on the regional extent of the potential economic losses engendered by the Covid-19 pandemic. Besides, insufficient information available for short-run costs makes it difficult

* Politecnico di Milano, ABC Department, Milan, Italy. e-mail: roberta.capello@polimi.it; andrea.caragliu@polimi.it (corresponding author).

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to foresee the likely future development paths of European regions in the aftermath of the pandemic.

This paper fills this gap with the use of the fourth version of the MAcroeconomic, Sectoral, Social, Territorial (MASST4; Capello, Caragliu, 2021a) model to build scenarios for 2021-2030, since a longer simulation period would not be credible, given the substantial degree of instability of the overall situation in these difficult times. The MASST4 model merges two conceptual streams by linking regional growth determinants and macroeconomic growth elements. In order to foresee the impacts of long run regional economic development patterns for European regions, a New Normality scenario, first developed in Capello and Caragliu (2020b), is here presented. On the basis of the short-run costs of the pandemic as happening in Spring 2020, the New Normality scenario produces the regional growth rates out of the economic contraction for the period 2021-2030.

The long term impact of the Covid-19 pandemic is measured as the missed growth of the *New Normality* scenario with respect to a *Reference* one, whereby Covid-19 did not take place. This offers the unique chance of highlighting the counterfactual nature of the pandemic. The achievement of this goal is not an easy task. Two long term scenarios have to be built, one of which based on short term estimates of the pandemic, which have to be estmated.

In the paper, we proceed as follows. In Section 2 we present a concise description of the MASST4 model, used to derive the simulated regional economic growth rates for both scenarios. The scenario construction methodology is presented in Section 3. Section 4 illustrates national and regional results for the New Normality scenario, against the backdrop of results obtained simulating the Reference scenario. Finally, Section 5 concludes and derives a few policy implications.

2. The MASST4 Model

Results presented in this paper are built through a process of simulation based on the MASST model in its fourth version. While the reader is referred to Capello and Caragliu (2021a) for a more thorough description of the latest generation of the model, it is here worth briefly recapping how the model works.

In order to generate future growth rates, the MASST model first estimates structural relations among exogenous and endogenous variables; in the second stage, the equation parameters identified through econometric estimates are used to calculate predicted values for the dependent variables, with exogenous variables set to previously predetermined targets. Target values for exogenous parameters are set according to internally coherent mix of assumptions of possible future combinations of context conditions that depict specific scenarios; this approach has been termed *quantitative foresight* (Capello, Caragliu, 2016).

In the MASST model, a national and a regional sub-model co-exist, both contributing to the simulation of future regional differential shifts, i.e. the deviations of regional GDP growth rates from their national means (Equation 1).

$$\Delta Y_r = \Delta Y_n + s, r, \in \mathbb{N} \quad [1]$$

In Equation [1], *r* indicates each of the 276 NUTS2 region in our sample, *n* represents the 27 EU Countries, while *s* stands for the regional differential shift.

The MASST model is simultaneously generative and distributive. It is a generative growth model, in that regional growth is interpreted mainly as a competitive process (Richardson, 1973). In this class of models, regional growth is seen as a "*zero-sum allocation and distribution of production*" (Harris, 2011, p. 914), and a region's growth takes place at the expense of another's (Richardson, 1978, p. 145). In the MASST4 model, the economic performance of a region depends mainly on its institutional context, i.e. on the national performance. Institutional features, organizational quality, and competitiveness in international trade influence regional economic performance; in the MASST4 model, the global economy acts as a trigger to regional economic performance through the increase in the demand for Country's products, within a classical Keynesian aggregate demand setting.[2]

The MASST model is also distributive; national growth rates are distributed to single regions depending on their factor endowments, which explain regional differential shifts (Garcilazo, Oliveira-Martins, 2015). In this sense, regional differential performance is mostly a supply-side mechanism, with both tangible (accessibility; regional policy expenditure; energy efficiency) and intangible (trust; human capital; quality of governance) assets making regions more competitive with respect to the Country mean. In the long run, exogenous variables tend instead to reach predetermined targets whose value is set depending on each scenario's underlying assumptions.

In its 4th version, the MASST model has been strengthened in many ways. The MASST4 has been reinforced in the macroeconomic part, measuring the macroeconomic changes in the period of post crisis, the regional part, inserting an endogenous productivity influenced by the 4th industrial revolution, and its urban part as well. For the last one, it now contains the role of city dynamics in stimulating national economies through their endowment of hosted functions, the quality of local governance (Peirò-Palomino *et al*. 2020), and the capacity to cooperate through quality long-distance scientific networks (Capello, Caragliu, 2018).

A final important remark on the MASST4 model is related to the relevant effort in building a comprehensive data base covering the universe of EU NUTS2 regions. In the 2013 version, these comprise 276 administrative units, with a

2. For a historic review of the different versions of the model, see Capello and Caragliu (2020b).

panel structure covering the period 2000 through 2017 for the national model and comprising for the first time a full panel structure for the regional model as well. The first year for which MASST4 produces simulated growth rates is 2018, and the simulation process can potentially reach 2035. A longer simulation would lose credibility in that constant coefficients in the estimated structural equations would become less and less meaningful as the economic structure of EU regions adjusts.

3. The Reference Scenario and the New Normality Scenario

3.1. The Reference Scenario

In order to highlight the substantial impact exerted by the Covid-19 pandemic on European regional economies, as previously anticipated, this paper presents the results of simulating a *New Normality* scenario (Capello, Caragliu, 2020b) seen as a difference with respect to results of a so called Reference scenario (Capello, Caragliu, 2021a).

Starting from a reference scenario, this is not a simple extrapolation of past trends, since it takes into account the structural changes that have appeared in the decade prior to the Covid-19 pandemic as a consequence of the 2008 crisis.

The assumptions of the Reference scenario are presented in Table 1. In the reference scenario, several pre-crisis macroeconomic conditions are unlikely to remain valid in the aftermath of the 2008 crisis, while other trends could prove to be persistent. For instance, while a high volatility of investments brought about by the crisis is expected to remain for the years to come, a standard reactivity of investment growth to GDP growth will be replaced by a high reactivity, even though at decreasing rates; free international trade between US and EU is replaced by the ongoing risk of protectionist measures between US and EU, leading to lower increases in export with respect to the past trend. Other trends likely to remain valid include substantial limitations to national deficits and debts (with limited exceptions for low-growth and indebted countries), low inflation rates, and a close end to expansionary monetary policy.[3]

Also at the regional level, new trends have emerged, that need to be captured by MASST4 in the *Reference* scenario. For instance, slow increases in R&D expenditure and human capital in Central and Eastern European Countries (henceforth, CEECs) are expected to remain also in the aftermath of the 2007/2008 financial crisis. A redistribution of the European budget would take place in favor of new fields – security and migration – decreasing the share of

3. For an in depth analysis of the post-crisis structural changes, see Capello and Caragliu (2021b).

budget devoted to cohesion policies and Community Agricultural Policy (CAP), setting national shares to the levels decided in EC (2018), and maintaining regional shares as in the 2014-2020 programming period.

Moreover, major changes occurred in structural economic relations, following the emergence of populistic movements (the celebrated *geography of discontent*; Mc Cann, 2020), ultimately leading the UK to the decision to leave the European Union.

In addition, the Reference scenario assumes the surge of the new technological paradigm (labelled *Industry 4.0*) for the future of Europe. A new technological revolution is in fact taking place, comprising wide-ranging technological fields, such as artificial intelligence, robotics, internet of things, autonomous vehicles, 3D printing, sensors, nano-technologies, biotechnology, energy storage, just to name a few of them (Brynjlfsson, McAfee, 2014; Schawb, 2017), which also pushes to 10 years trend of deindustrialization (Wink *et al*., 2016; Lee *et al*. 2015). The MASST4 model has been revised so as to also endogenize the probability of a regional economy to go through a structural evolution in its innovation modes (Asheim, 2012; Capello, Lenzi, 2018).

3.2. The New Normality Scenario

In Spring 2020, Covid-19 quickly reached Europe, forcing most EU countries to enact severe lockdown measures aimed at preventing the further diffusion of the virus, in the absence of effective cures for the health problems caused by it (Capello, Caragliu, 2020a). As a consequence, a post-2008 crisis *Reference* scenario can no longer represent a realistic scenario for any future simulation, in that the overall picture likely to emerge from the end of the pandemic will very likely be rather different from the one depicted with a *Reference* approach. The scenario built to model the likely way European regions will emerge out of the presently ongoing crisis is labelled *New Normality*.

In order to develop this scenario, two intermediate steps are needed. Firstly, short-run estimates of the GDP during the pandemic are calculated for all European NUTS2 regions. Secondly, a long-run scenario of the economic growth taking place from 2021 through 2030 is also modeled, assuming that no further national lockdowns will be undertaken in European countries.[4] In other words,

4. It is important to emphasise that, at the time of writing, it is not possible to determine how the pandemic will develop over the last quarter of 2020 and early into 2021; we have assumed that no additional strict national lockdowns will take place in autumn and winter. While at the time this paper is being written evidence that a second wave of lockdowns (in general with milder measures with respect to the Spring ones) is being enacted, incorporating their effects into these simulations given that the time required for assembling the hard evidence on the way lockdowns are put in practice is not compatible with the timeframe of this work. It can nevertheless be argued that results of our simulations would not change from a qualitative point of view, especially because

Table 1 – Qualitative Assumptions for the Reference Scenario

Qualitative assumptions	*Model's levers*	*Quantitative assumptions (targets in 2035)*
	Assumptions on macroeconomic trends	
High volatility of investments, decreasing in the long run	Coefficient of investment trends	Lower value
High reactivity of investments growth to GDP growth, decreasing in the long run	Coefficient of GDP growth with respect to Investment growth	Lower value
Risk of protectionism and therefore lower export increase	Constant of export growth	Lower value
Permanent controls on national deficits and debts	Targets on deficits and debts	3%: Deficit / GDP 60%: Debt / GDP for Eastern countries 90%: Debt / GDP for Western countries 110%: Debt / GDP for Western countries belonging to cluster 1*
Some controlled exceptions of public expenditures	Targets on debts	110%: Debts over GDP on "problematic countries"
Low inflation rate	Inflation rate	2.5% Western countries 5% Eastern countries
End of the expansionary monetary policy (quantitative easing)	Interest rates	3% Western countries; 4% Eastern countries 4% Western countries belonging to cluster 1; 6% Eastern countries belonging to cluster 1
	Assumptions on industrial trends	
Initial launch of high-tech industry in Europe	EU growth rate of High-tech industrial sectors	Increase of value added at European level for high-tech industries (+1.5% as an average with respect to the past)
Increase in high-value added services related to the adoption of Industry 4.0 related technologies	EU growth rate of High-tech service sectors	Increase of value added at European level for service industries (+1.5% as an average with respect to the past)
A slow catching-up in R&D expenditure in CEECs	R&D / GDP in CEECs countries	+ 0.5% with respect to the post crisis period in Eastern countries
A slow catching-up in human capital in CEECs	Human capital in CEECs countries	+2% with respect to the post-crisis period in Eastern countries

(follows...)

(...continue)

Qualitative assumptions	*Model's levers*	*Quantitative assumptions (targets in 2035)*
	Assumptions on institutional trends	
Brexit from 2020	Regional input-output trade between UK NUTS2 and all other NUTS2 in Europe, applied as a distance for spillovers of growth	Trade distance increased to a maximum, limiting growth spillovers.
	Geographical distance between UK NUTS2 and all other NUTS2 in Europe	Distance increased to a maximum, limiting growth spillovers.
Decrease in the cohesion policy expenditures	Expenditures of cohesion funds by NUTS2	National shares equal to the levels decided in the document of 29th May, maintaining regional shares as in the 2014-2020 programming period
	Urban settlement related assumptions	
Increase in urban amenities in Western countries	Urban amenities	2% increase in large cities 1% 0.5%
Upgraded quality functions	High-value functions	Increase of: 3% large and medium cities in Western countries 1% small cities in Western countries 2% large cities in Eastern countries 1% medium cities in Eastern countries 0.5 small cities in Eastern countries
Cooperative behaviour among cities everywhere	Networking behaviour	10% large cities in Western countries 5% medium cities in Western countries 3% small cities in Western countries 8% large cities in Eastern countries 4% medium cities in Eastern countries 2 small cities in Eastern countries

Legend: * cluster 1 countries include Cyprus, Finland, Greece and Italy, i.e. the slowest-growth countries in the after-crisis period

the *New Normality* scenario still assumes that structural changes resulting from the global financial crisis in 2008 (higher investment volatility, higher dependence of investments on GDP, volatility of export and imports, higher tolerance for Southern countries' stability pact) continue to characterize the EU.

Regional GDP levels at 2020 are first estimated, with the inclusion of short-run targets modeling the way Covid-19 has impacted European regional economies. *Reference* targets are next applied to this first vector of (estimated) data, covering the year 2020, with targets set for the period 2021-2030 under the assumption that longer simulation periods would not be credible, given the substantial degree of instability of the overall situation in these difficult times.

Qualitative assumptions for the *New Normality* scenario are summarized in Table 2. Particular attention has been paid to model the funds available by the recovery plan drawn up by the European Commission. These measures support the recovery of EU economies through investment that amount to EUR 1.82 trillion, comprising the multiannual financial framework (MFF) and the extraordinary recovery effort termed *Next Generation EU*. The New Normality scenario also captures structural changes likely taking place in the economic and social spheres as an enduring consequence of the Covid-19 pandemic. These include evolving consumption patterns, still focusing on online sales, at the expense of traditional commercial activities. New social behaviors will also emerge, including a persistent use of digital communications imposed by the Covid pandemic, with a consequent contraction of business travels. Within this framework, Industry 4.0 would also resume its growth at full extent, thus reinforcing high-tech manufacturing in Europe.

The results of a *New Normality* scenario simulation are not necessarily worse than in the *Reference* case. For instance, additional investment spurred by the Next generation EU plan may actually prove, in the long run, to be more than enough to compensate the dramatic costs of the Spring 2020 lockdowns. On the other hand, the initial contraction may be so severe that, even expecting a major rebound from 2021 onwards, average annual GDP growth rates will be on average lower in the New Normality scenario, reflecting the long term cost of the Covid-19. The answer to this question is presented in Section 4.

4. The Costs of the New Normality

This section presents results of the simulation of the costs of the New Normality, measured as difference between the New Normality scenario and the results

the second wave of the pandemic in Europe is proving to be, unfortunately, more pervasive and spatially homogeneous even than in Spring 2020 (Cacciapaglia *et al*., 2020), thus likely causing less spatial imbalances than those already illustrated by the foresights here presented.

Table 2 – Qualitative Assumptions for the New Normality Scenario

	2020 (costs of Covid)	*2021-2030 (New Normality)*
	Coefficients in the crisis period	*Coefficients in the post-crisis period*
	Assumptions on macro factors	
Debt/GDP	General relaxing of Maastricht rules, proportional to starting levels	Convergence towards Maastricht parameter
Interest rate	Interest rates remain low in the short run	Increased debt levels cause higher interest rates
Inflation rate	Nil across all Europe	Reprisal of inflation rates
Deficit/GDP	Relaxed Maastricht rules (8% deficit everywhere)	Maastricht targets are met by northern European countries; some relaxing of Maastricht rules for southern European countries
GDP growth US-JP-BRIC	Major GDP contraction in US and Japan; milder contraction in BRIC Countries	Mild GDP growth in US and Japan; growth in BRIC Countries
FDIs	Major contraction of FDIs w.r.t. before the lockdown	FDIs resume to pre-Covid levels
Consumption levels	Contraction of consumption levels everywhere	Consumption levels regain pre-Covid levels
Investment	Contraction of investment levels everywhere	Major boost in investments due to the recovery plan
Export and import levels	Contraction of import and export levels everywhere	Major reprisal of import and export levels (+10% w.r.t. pre-Covid levels)
	Assumptions on regional factors	
Industrial specialisation	Major contraction in all activities, other than agriculture and public administration	Pre-Covid levels for high-tech activities; permanent minor contraction for tourism and transport; contraction for other manufacturing
Input/Output relations	20% decrease in the intensity of I/O relations everywhere	I/O relations resume to pre-Covid levels
Innovation	No major change	Major increase in innovation-intensive regions; medium increase in medium performing regions; minor increase in other areas
Trust and social capital	Contraction (-10%) of trust levels everywhere	Partial (+5%) reprisal of trust levels everywhere w.r.t. the lockdown period
Death rate	+40% in the areas hit the hardest by the Covid pandemic; +10% elsewhere	Return to pre-Covid rates
Energy efficiency	No change	Increase (+10%) due to the measures issued in the recovery plan

Source: Authors' elaboration

of the Reference scenario, where the COVD-19 would have not taken place. Table 3 shows the difference in the average annual GDP growth rates between 2017 and 2030 for all EU28 Countries obtained in the New normality scenario with respect to the *Reference* scenario.

Reconnecting to the question concluding Section 3, Table 3 shows a rather complex picture, with some of the countries hit the hardest from the immediate costs of the pandemic being actually capable of recovering faster in its aftermath. This is in particular the case of France, Italy, Belgium, and Spain. Another outcome shown in Table 3 refers to countries whose economic growth would be faster in the case of the *New Normality* scenario, with however a smaller difference with respect to the *Reference* case. This is typical of Countries that initially faced lower costs from the Spring lockdowns (e.g. Germany).

A third typology of Countries shown in Table 3 encompasses those whose GDP growth substantially benefits from additional investment spurred by the EU plan devised to counterbalance the negative economic impact of Covid-19, or whose initial costs incurred in Spring 2020 have been somewhat lower. These include mostly Central and Eastern European Countries, such as Romania, Estonia, Bulgaria, and Slovakia, although this does not uniformly applies. Poland, for instance, has exactly the same GDP growth rate forecasted in the two scenarios.

Lastly, Table 3 suggests that some Countries will not fully counterbalance the major slump taking place in 2020, ultimately being damaged by the costs of Covid-19 more than recovery measures will be able to amend. This is the case of Austria, Croatia, and Finland. Moving to the regional set of results, Figure 1 shows the map of average annual GDP growth rates in European regions between 2020 and 2030 as a difference between the New Normality and the Reference scenarios. In Figure 1, colors are represented with darker red when the difference between the New Normality and the Reference scenarios are larger, while increasingly smaller differences are represented with increasingly more intense green shades.

Not only does this map display remarkable spatial heterogeneity, as indirectly implied also by national results shown in Table 3. Also, within the same country regions present a rather substantial degree of within countries differences.

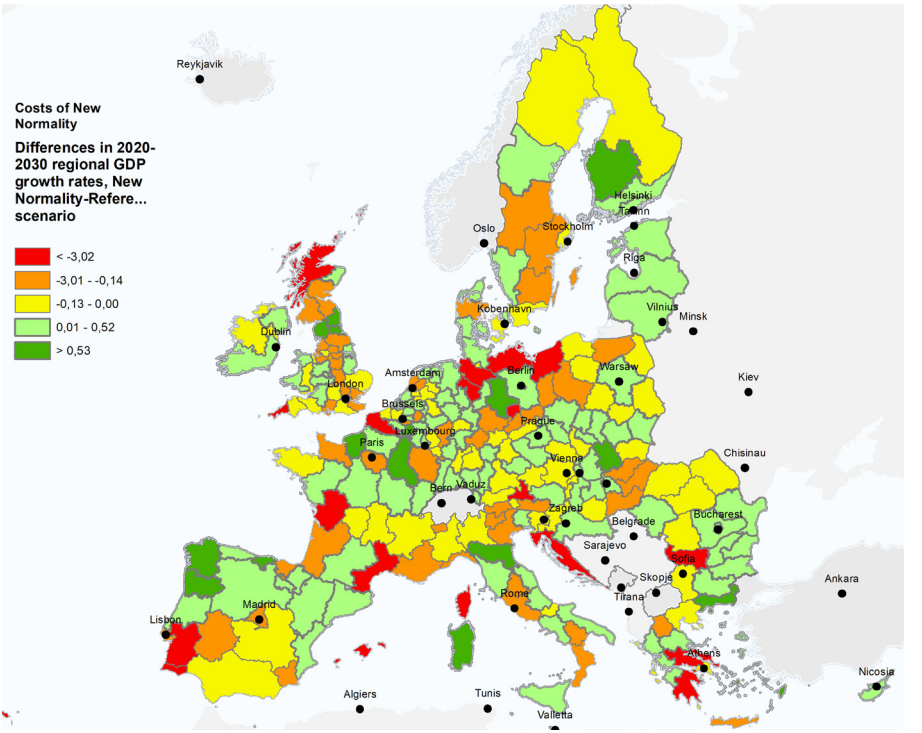
For instance, this is the case of several areas (marked in dark red, i.e. regions incurring the highest long run costs due to the Covid-19 pandemic) located in peripheral regions in France, Italy, Spain, and Portugal, whose country performance will benefit from the bounce back logically following the initial slump, but whose economic growth will lack. In these Countries, other regions (e.g. Champagne-Ardenne in France, Emilia-Romagna in Italy, Galicia in Spain) will compensate for losses mostly concentrated in other peripheral and rural areas.

Table 3 – Differences in Average Annual National GDP Growth Rates in the New Normality and in the Reference Scenarios, 2020-2030

Country	*Differential GDP growth rate (new normality vs reference)*
Austria	-0.03
Belgium	0.12
Bulgaria	0.75
Croatia	-0.39
Cyprus	0.53
Czech Republic	0.17
Denmark	0.12
Estonia	0.62
Finland	-0.13
France	0.16
Germany	0.06
Greece	0.01
Hungary	0.20
Ireland	0.13
Italy	0.18
Latvia	0.57
Lithuania	0.55
Luxembourg	0.39
Malta	0.77
Netherlands	0.23
Poland	0.00
Portugal	0.04
Romania	0.42
Slovakia	0.31
Slovenia	0.10
Spain	0.12
Sweden	0.13
United Kingdom	0.00

Source: Authors' elaboration on the basis of MASST4 simulations

Figure 1 – Differences in Average Annual Regional GDP Growth Rates in the New Normality and Reference Scenarios, 2020-2030



Source: Authors' elaboration on the basis of MASST4 simulations

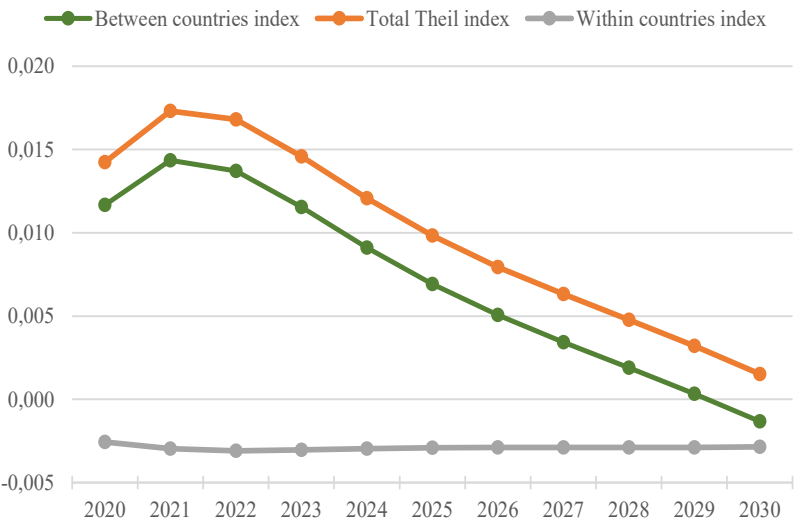
The British situation shows all its drama, registering mostly all regions in the country paying a high cost due to the pandemic; especially Scotland and the rich South pay the highest cost.

While in general losses do tend to be highest in rural and non-core regions, some major urban areas show significant long-run losses, despite facing initially lower health costs. This is for instance the case of the Lisbon area in Portugal, and Attiki (with the capital city Athens) in Greece. And Ile de France with the capital city Paris in France.

The causes behind the positive rebound that drives regions to a higher GDP growth the respect to a reference scenario are namely:

- urban areas with respect to rural ones (p-value of the t-test for mean differences equal to 0.12); this weakly suggests that urban areas basically do not lose from the *New Normality* scenario;

Figure 2 – Differences in Total, between and within Countries Theil Indices, in the New Normality and Reference Scenarios, 2020-2030



Source: Authors' elaboration on the basis of MASST4 simulations

- quality of government (Charron *et al*., 2019) (p-value of the t-test for mean differences equal to 0.13), which confirms the importance of good formal and informal institutions for the efficient spending of the Recovery fund;
- presence of high-tech firms and industries (Simonen *et al*., 2015) (p-value of the t-test for mean differences equal to 0.11), getting all advantages from the digital technologies, fundamental to do business, to entertain people and to teach during the pandemic and moving towards a 4th technological transformation of the society.

A last set of analyses has been performed for verifying whether the New Normality scenario will have any effect on regional disparities. This is done by calculating a Theil index of regional inequalities, which is amenable to a useful decomposition of total disparities (green line in Figure 2) into inter-national disparities (Between Countries Index; orange line in Figure 2) and intra-national disparities (grey line in Figure 2).

The Theil Index of Regional inequalities is calculated as follows (Equation 2):

$$Theil = \frac{1}{N}\sum_{i=1}^{N}\frac{y_i}{\bar{y}} ln\left(\frac{y_i}{\bar{y}}\right) \quad [2]$$

where N is the number of regions, y_i is the variable of interest in the ith region (in this case, regional GDP) and is the average regional GDP calculated for all regions (OECD, 2016).

Figure 2 presents the difference in the regional disparities between the two scenarios. Being the total disparity line (continuous line) always above zero (also in the last year), the first important result is that the Covid-19 has substantially generated an increase in disparities that remain over time. Moreover, between country disparities are greater in the New Normality w.r.t. the reference, in that the between country line (dashed line) is above the total disparity line, witnessing that the Covid-19 pandemic hit differently the different countries, but that the difference decreases with time. The within country disparities (dotted line) are lower in the New Normality than in the Reference, witnessing that within each country the costs of the New Normality are spatially diffused, and remain constant over time.

5. Conclusions and Policy Implications

This paper presents the results of the costs of a *New Normality* scenario, measured as the costs of a scenario with Covid-19 and one without.

Results show that, despite substantial short-run costs of the Covid-19 pandemic, in the long run European Countries and regions will not necessarily lose from the massive negative exogenous shock just happening as we write these conclusions. Some EU Countries and regions will actually be capable of bouncing back and show remarkable resilience. While further research is definitely called upon to understand the microfoundations of these effects, the two most likely causes for such resilience can be traced to the robust injection of EU money (totaling EUR 1.82 trillion for the 2020-2027 period), meant to sustain the rebound of European economies, and the reaction of European manufacturing to the further diffusion of ICT as means of long-distance communication and boosting productivity.

However, our findings also hint at two sources of relevant costs. On the one hand, we do identify some net losers even after taking the two above-mentioned positive factors into account. On the other hand, spatial heterogeneity in the short-run and long-run impacts of the healthcare emergency will also cause a substantial increase in (in the short-run) international and (in the long run) intranational disparities. For both sources of costs, policymakers may want to further analyze their causes, and find suitable remedies.

Policies dealing with these costs will be sorely needed not only for reasons of equity, but also to increase overall efficiency. It is in fact difficult to accept leaving countries and regions behind; the laggards are typically areas most exposed to the costs of the pandemic either because of their demographic structure, or also because of structural limitations of their healthcare systems or industrial

structure. However, it is also important to stress that by fostering a higher rebound than a GDP growth obtained in a situation without Covid-19, an important role is played by the quality of governance, which guarantees an efficient way of spending the extra budget made available by the Recovery Plan.

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Sommario

Impatti regionali del Covid-19 in Europa: i costi della Nuova Normalità

In questo articolo viene presentato l'impatto di lungo periodo della pandemia da Covid-19 sulla crescita delle regioni Europee. L'impatto è calcolato come differenza tra uno scenario di Nuova Normalità, imposto dal Covid, per il periodo 2021-2030 rispetto a uno scenario di Reference, ottenuto nell'ipotesi che la pandemia non avvenisse. Gli scenari sono costruiti grazie al modello MAcroeconomic, Sectoral, Social, Territorial (MASST4), costruito dagli autori, e in grado di creare scenari di crescita regionale per tutte le NUTS2 dei paesi membri dell'Unione Europea (UK inclusa) sulla base di un'interazione tra elementi macroeconomici e specificità locali. I risultati mostrano come alcune aree e paesi siano in grado di riprendersi dalla crisi Covid-19 e superare in dieci anni il tasso di crescita che avrebbero avuto senza pandemia. Altre, invece, registrano alti costi dovuti a una mancata crescita.