Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
6.1

Public policies for epidemic containment in Italy

Fulvio Adobati, Emanuele Comi, and Alessandra Ghisalberti

6.1.1 Premise

In line with our research methodology, reconnaissance, and assessment of the range of measures adopted to counter Covid-19 outbreaks are conducted on a multiscalar architecture: from European scale to Italian national scale, to a breakdown analysis for the separate Italian region.

Specifically, guiding criteria for assessing the adoption of restrictive measures in the event of contagion or, alternatively, for relaxing measures in a European context may be said to fall within three categories (EU, 2020): (i) epidemiological criteria indicating the number of hospital admissions and/or new cases of contagion over an extended period of time; (ii) capacity and infrastructural endowment of healthcare systems; (iii) monitoring effectiveness, also in terms of large-scale diagnostic capabilities that make it possible to quickly identify and isolate infected people and in terms of track and trace strategies.

Such measures entail a system of rules, which over time has been enforced with varying degrees of severity, from informal recommendation to strict imposition, as regards device use and personal behavior. These guidelines are effectively condensed in the three catchwords promoted by the UK government-Department of Health and Social Care: (i) “hands,” proper and systematic hand cleaning; (ii) “face,” respiratory protection via masks or face coverings; (iii) “space,” minimum spatial distance between individuals in case of contact.

*The chapter is the result of joint research carried out by the three authors. More specifically, Fulvio Adobati compiled Sections 6.1.1 and 6.1.5; Emanuele Comi Sections 6.1.2.1, 6.1.2.2, and 6.1.3; Alessandra Ghisalberti Sections 6.1.2.3 and 6.1.4.
6.1.2 Contagion containment measures in Europe and their space–time evolution

6.1.2.1 The measures taken by the European Union

It is well known that among its constituent principles, the European Union includes the free movement of people and goods across Member States. The imposition of limits set by Member States on freedom of movement on account of Covid-19 contagion and the prediction, on the part of EU agencies, of further freedom restrictions attest to the gravity of the epidemic.

One of the first, albeit nonprescriptive, official proceedings whereby a position was taken on the measures adopted was European Commission Communication COM (2020) no. 115 of 16 March 2020. At a juncture when some countries, such as Italy, had already foreseen a general closure of activities and stringent travel restrictions, the Communication seems to legitimize measures independently adopted by individual countries. Generalized restrictions on circulation are recommended: however, with a view to ensuring policy coordination, exceptions to be warranted are also indicated. The adoption of coordinated and binding rulings for Member States is ultimately deferred to the European Council. Also on March 16, 2020, in the Official Journal of the European Union, the “Guidelines on border management measures designed to protect health and ensure the availability of essential goods and services” were issued by the European Commission. While these have no mandatory scope, they do mark an attempt to encourage the adoption of measures for restricting movement while safeguarding the free movement of goods within the Union.

From March 17, 2020, following the aforementioned Commission proceedings, Member States have begun to introduce generalized forms of restriction to circulation in a coordinated approach.

Subsequently, on March 30, 2020, with Communication C (2020) no. 2050, the Commission adopted guidelines, still of a nonbinding nature, on the implementation of temporary restrictions for nonessential travel within the European Union and, again on March 30, with Act no. 2020/C 102 I/03, of guidelines on the circulation of workers. With Communication COM (2020) no. 148 of April 8, 2020, an extension of measures beyond the monthly timeframe envisaged at the beginning of March was legitimized.

Once again via nonbinding Acts, on April 8, 2020 and April 16, 2020 the Commission set out recommendations and guidelines on infection tracing devices.

---

*According to the European Court of Justice, “Treaty articles related to the free movement of goods, persons, services and capital constitute fundamental Community rules and [...] any obstacle to such freedom, albeit minor, is forbidden (in particular, see sentences dated 13 December 1989, case C-49/89, Corsica Ferries France, ECR 4441, paragraph 8, and 15 February 2000, case C-169/98, Commission v France, ECR p. I-1049, paragraph 46)” (CJUE, sentence 1 April 2008, in case C/212-06, par. 52). Literature on this point is vast. By way of example see: Rossi Dal Pozzo (2012), Daniele (1989).

*Such as, for instance, the right of Union citizens, residents, and their families to return home; the movement of workers engaged in essential services and the rights of passengers traveling for “imperative family reasons.”

*Act no. 2020/C 86 I/01.

*This is reflected in Communication of the European Commission COM (2020) no. 148 of 8 April 2020.

*EU Commission, Recommendation (EU) 2020/518 of 8 April 2020 and Communication 2020/C 124 I/01 no. C/2020/2523 of 16 April 2020.
On 15 April, however, the European Commission and the President of the European Council adopted a “roadmap” to encourage plans for a gradual reopening of borders, and the lifting of containment measures.\(^6\) Again, on May 8, 2020, faced with the persistence of the epidemic crisis—the Commission recommended that Member States extend temporary restrictions on non-essential travel until 15 June.\(^8\) Nonetheless, with a series of Acts of May 13, 2020, it also issued guidelines in view of hopeful reopenings.\(^b\)

Finally, due to the slowdown of the epidemic, with recommendation dated June 11, 2020, the Commission called for the lifting of internal controls at the Union’s borders, keeping in place only travel restrictions outside Europe.\(^i\)

At the end of this brief overview, it should be acknowledged that, by adopting the measures mentioned above, the European Union did legitimize epidemic containment policies in the form of general restrictions on freedom of movement. At the same time, however, the Union aimed from the start to guarantee support to States most affected by the emergency, for instance by facilitating the transfer of patients to less affected countries.\(^j\) Above all, it strove (via the common market) to ensure market availability of medical devices,\(^k\) to the point of waiving taxation on such products in order to contain prices.\(^l\)

### 6.1.2.2 Measures adopted by the European States and measure severity index

As mentioned above, since 16 and 17 March 2020, in accordance with (albeit nonbinding) guidelines laid out by the Commission, Union States together with other non-Union European States, have progressively introduced generalized and coordinated forms of circulation restriction.\(^m\)

European Commission guidelines were implemented by single States in a variegated range of different measures, tied to local epidemiological contingencies, to the nature of each

---

\(^6\)More information of this roadmap may be found at: [https://ec.europa.eu/info/files/communication-european-roadmap-lifting-coronavirus-containment-measures_en](https://ec.europa.eu/info/files/communication-european-roadmap-lifting-coronavirus-containment-measures_en).

\(^8\)European Commission, Communication COM (2020) 222 of 08 May 2020.

\(^b\)European Commission, Communication 2020/C no. 169/03 C/2020/3250 of 13 May 2020; Communication COM (2020) 550 of 13 May 2020.

\(^i\)European Commission, Communication COM (2020) 399 of 11 June 2020.

\(^j\)By supporting cooperation in cross-border healthcare since European Commission Communication C (2020) no. 2153 of 03 April 2020 on the subject of “Guidelines on EU Emergency Assistance in Cross-Border Cooperation in Healthcare related to the Covid-19 crisis.”

\(^k\)For instance, by authorizing export outside the Union of personal protective equipment via Implementing Regulation (EU) 2020/402 of 14 March 2020; yet—by contrast—stigmatizing prohibitions on supply to other EU countries (for example, in the aforementioned COM (2020) no. 115 of 16 March 2020) or public hoarding in the absence of valid health reasons (see Commission Communication 2020/C no. 116 I/01 of 08 April 2020). Also, by providing “green lines” along which border controls could be carried out swiftly to guarantee supplies (Commission Communication C (2020) no. 1897 of 23 March 2020).

\(^l\)Commission Decision C (2020) no. 2146 of 3 April 2020 which, for 6 months, exempted face masks, protective devices, testing kits, ventilators and other medical equipment from VAT and customs duties.

\(^m\)This is reflected in Communication of the European Commission COM (2020) (2020) no. 148 of 8 April 2020.
country’s constitutional framework and, finally, to political choices made by legislative and executive bodies.

Some European academic institutions sifted the vast amount of data available on the measures taken by individual States: they have conducted studies on such measures and, in some cases, on their tangible impact. In particular, research conducted at the London Imperial College on the impact of nonmedical-pharmaceutical measures on viral spread (Flaxman et al., 2020a) have pointed out that—for the rest of Europe, with the exception of Italy, which had already adopted initial containment measures—States on the European continent began to place restrictions exactly between 16 and 17 March 2020 (Flaxman et al., 2020a, p. 5). The study carried out by the Blavatnik School of Government at the University of Oxford reached even farther. It examined measures adopted by all States and developed a severity, or stringency index which outlines the pervasiveness of the measures adopted by the State, as also shown in the following figure.

6.1.2.3 A severity index map for Europe

The “stringency index” developed at the University of Oxford quantifies the severity level of political measures deployed by individual countries worldwide in response to the Covid-19 epidemic. This index was computed by cross-referencing 17 different indicators related to policies activated by each government for Covid-19 containment across various areas, such as restrictions on individual mobility or closure of production and commercial activities. An index evolution analysis makes it possible to carry out a comparative study on Covid-19 containment interventions by individual States in a space–time perspective, using interactive mapping devised by the same Oxford research group for visualizing the evolution of severity of policies starting from January 21, 2020 to the present.

Fig. 6.1 shows select images from the “Oxford Covid-19 Government Response Tracker” mapping system, which enable us to track the “stringency index” evolution over time and to record Italy’s swift political intervention, a precursor with regard to the wider European territory.

Specifically, Fig. 6.1 shows the severity index in European countries on four different dates between February and June 2020—the period covered by our study. These account for Italy’s pioneering role in epidemic containment policies. Quadrant (a) in the figure, referred to February 23, 2020, is color-coded in dark blue to mark the highest level of severity—solely recorded in Italy—of Covid-19 containment policies at the onset of the epidemic phase. National Statutory order (D.L.N.) 6—to be addressed in detail in the pages that follow—was in fact approved on that date. It set out urgent measures (unprecedented in Europe) for the containment and management of the Covid-19 epidemiological emergency across the Italian territory, and established a so-called “red zone” in the area of the two Municipalities of Codogno and Vo’ Euganeo. The stringency of Italian policies at the time is in sharp

---

6.1. Public policies for epidemic containment in Italy

We are thinking here of research outcomes achieved at the Blavatnik School of Government of Oxford University, which produced the “Oxford Covid-19 Government Response Tracker” (OxCGRT) system for collecting and displaying information on the policies adopted by 180 countries around the world. In particular, the research team produced interactive and diachronic mapping which may be consulted here: https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker.
contrast with other European countries where no rigid policies had yet been implemented, a fact visualized by light-yellow color-coding on the map. Conversely, quadrant (b) records a subsequent increase in the stringency index for various other European countries and, as of March 16, 2020, an extension of containment policies in much of Europe, here color-coded in light blue. Even on that date, however, the marked stringency of containment policies in Italy, most affected by the epidemic, is evident and color-coded in dark blue. As the infection reaches its endemic phase, on May 4, 2020 (c), a consistent trend reversal may be seen across Italy, with the introduction of reopening policies. Color-coding in this case is seen to fade for the first time on Italy, while it takes on a darker shade across most of the European territory. Finally, quadrant (d) shows a further attenuation of the stringency index of Italian policies coinciding with the reopening of free circulation in Italy starting June 3.

Ultimately, digital mapping makes it possible to compare the evolution of severity level in containment policies adopted by individual European countries over time and promotes a spatio-temporal interpretation of the phenomenon. In particular, on the one hand, it underlines the difficulty of coordinated and consistent political intervention in Europe, to be ascribed for example to the absence of a common strategy for combating contagion, to unilateral and uncoordinated border closures, or to incongruous lockdown measures (Lumet and Enaudeau, 2020). On the other hand, it highlights the swift political intervention of the Italian Government in the face of an exponential rise of infection during the epidemic phase, first, and its equally swift containment in the endemic phase, later.

FIG. 6.1  Different containment measures in European Countries between February and June 2020. Source: Local processing of “Oxford Covid-19 Government Response Tracker” data, University of Oxford, 2020.
Cartography highlights the pioneering role of Italy in the European context as a reference model in emergency management for various European countries. At the same time, digital mapping also shows that rapid intervention in Italy had a positive impact on the evolution of contagion because it facilitated containment, as discussed in the pages that follow.

6.1.3 The Italian legal system

6.1.3.1 Introduction

As we turn to the Italian context, we may note that Italian public administrations have played a significant role in combating the Covid-19 epidemic and in managing the health emergency that ensued.\textsuperscript{o} Associations and private individuals also played a role in these areas, participating in many ways with independent initiative or via action coordinated with the public administration.\textsuperscript{p} Initially, however, a range of actions, for instance serological testing, were set up exclusively via public monopoly and excluded private sector agencies.\textsuperscript{q}

Due to the scope of research, we will focus exclusively on the role played by public administrations and on the policies undertaken that may have affected the handling and containment of the epidemic.

In a nutshell, in the management of emergencies, and notably of health emergencies, the Italian legal system provides for a range of competitive legislative sources. Excluding legislative sources, and especially urgency provisions,\textsuperscript{r} there exists in the first place a government-based administrative jurisdiction, which may be exercised by the President of the Council of Ministers,\textsuperscript{s} by the Head of Civil Protection\textsuperscript{t} and by the Minister of Health.\textsuperscript{u} These legislative and provisionary powers, entrusted to government bodies, are matched by the competence of Region Governors\textsuperscript{v} and Mayors.\textsuperscript{w} A distinctive feature of such powers is that they are on the whole atypical. In other words, they may address any type of content and, accordingly, prescribe any type of writ.

The analysis will focus mainly on the Lombardy region and on Lombard local administrations, as well as on bordering regions which faced the most severe effects of the first epidemic wave.

---

\textsuperscript{o}It seems crucial, in fact, to underline the eminently public role of collective health protection.
\textsuperscript{p}For example, donation-based building of hospitals, PPE production or purchase of medical equipment.
\textsuperscript{q}In Lombardy, DGR (Regional Government Decree) 12 May 2020, no. XI/3131 eventually established that private testing facilities may offer services of this kind, even outside the conventional policies of the regional healthcare system.
\textsuperscript{r}Albeit frequently used to deal with emergency, both to provide for specific measures where required by law, and to waive other ordinary legislative provisions.
\textsuperscript{s}TU civil protection.
\textsuperscript{t}TU civil protection.
\textsuperscript{u}Art. 32 SSN-National Health System institutive decree.
\textsuperscript{v}Art. 32 SSN-National Health System institutive decree.
\textsuperscript{w}Art. 50 of Legislative Decree no. 267/2000.
6.1.3.2 National containment measures in Italy

The first formal Act marking a response to the Covid-19 health emergency was the declaration of the state of emergency approved by the Council of Ministers on January 31, 2020.\textsuperscript{x} The provision falls within the emergency powers permanently endowed to the government by civil-protection legislation and, in particular, by the so-called “Civil protection code,” adopted by legislative decree 2 January 2018, no. 1\textsuperscript{y} and substantially amended at the very onset of emergency by legislative decree 6 February 2020, no. 4.

Possibly faced with the inadequacy of ordinary emergency management tools to deal with the Covid-19 epidemic, the Government—in the exercise of its emergency legislative powers set forth by art. 77 of the Constitution—approved legislative decree February 23, 2020, no. 6. With this statutory order, an unprecedented method of exercising emergency powers was outlined in the Italian system, at least in the humble opinion of the present writer. The decree in fact endows the President of the Council of Minister with a very broad range of powers for restricting constitutionally guaranteed rights.\textsuperscript{z}

At the same time, the Legislative Decree 6/2020 seeks to outline a redefinition of ordinance powers in healthcare matters historically ascribed to the multiple administrative agencies mentioned above.\textsuperscript{aa}

Via a DPCM also dated February 23, the President of the Council of Ministers began to adopt—among others—a series of prescriptions restricting freedom of movement and business activity. These were subsequently tightened up through the same administrative instrument as the situation worsened and finally alleviated as normality was progressively reestablished. At the same time, both national ordinances (of the Civil Protection and the Minister of Health) and regional and municipal ordinances were brought in order to issue alternative regulations on what already established by national legislation or to introduce further provisions, both towards a restriction or extension of freedoms.

6.1.3.2.1 Restrictions on freedom of movement

As mentioned, the first Act of actual restriction to freedom of movement was by Decree of the President of the Council of Ministers (DPCM) of 23 February 2020, whereby mobility to (Article 1, paragraph 1, letter a) and from (art 1, paragraph 1, letter b) the municipalities of the Codogno area\textsuperscript{ab} in Lombardy and Vo’ Euganeo in Veneto was forbidden, and a corresponding red zone” was established.

\textsuperscript{x}The provision is entitled “Declaration of a state of emergency as a consequence of the health risk associated with the onset of pathologies deriving from transmissible viral agents.”

\textsuperscript{y}“Ordinary” emergency legislation has been in place since 1992. Legislative Decree no. 1/2018 was heavily amended by legislative decree no. 4/2020 of February 6, 2020 with regards to areas of competence.

\textsuperscript{z}This approach is confirmed by subsequent law decrees, which generally and abstractly impose a very wide range of restricting powers onto the legal sphere of subjects, the actual exercise of which is delegated to the Decree of the President of the council of Ministers.

\textsuperscript{aa}Restriction of local authorities to rules “not in contrast” with those of the State.

\textsuperscript{ab}Municipalities included (a) Bertonico; (b) Casalpusterlengo; (c) Castelgerundo; (d) Castiglione D’Adda; (e) Codogno; (f) Fombio; (g) Maleo; (h) San Fiorano; (i) Somaglia; (j) Terranova dei Passerini.
DPCM dated March 1, 2020 confirmed the ban on mobility from the municipalities of the so-called red zone of Codogno and of Vo’ Euganeo (Article 1, paragraph 1, letter a) and renewed the prohibition to access the same municipalities (Article 1, paragraph 1, letter b).

As of 8 March, for Lombardy and for other Italian provinces where infection rates were high,\textsuperscript{ac} the decree of the President of the Council of Ministers urged citizens to “avoid” any movement into and out of the territories or within the same territories.\textsuperscript{ad} This recommendation was extended to the whole national territory on March 9, 2020,\textsuperscript{ae} and included a ban on gatherings.\textsuperscript{af}

As of March 22, 2020, citizens were thoroughly banned from moving to a municipality other than the one in which they resided, except for proven work needs, of absolute urgency or for health reasons.\textsuperscript{ag}

Measures were partially lifted on April 26, when the meeting of relatives was admitted, albeit without going beyond regional boundaries.\textsuperscript{ah} As of the same date, those who had found themselves outside their own municipality on March 22 were also allowed back home.

Finally, as of June 3, provisions restricting travel between regions ceased to be enforced, effectively reopening circulation within the country.

### 6.1.3.2.2 Restrictions on educational, community and collective recreational activities

Still in the Codogno area in Lombardy and Vo’ Euganeo in Veneto, starting as for February 23, 2020, all events or initiatives of any nature and any form of meeting in either public or private venues were suspended (Article 1, paragraph 1, letter c), as were education services and schools of any rank or level (Article 1, paragraph 1, letter d) and school trips (Article 1, paragraph 1, letter e). Again, as of the same date areas museums and similar venues were closed to the public across the same area (art. 1, paragraph 1, letter f).

In all municipalities for the regions of Emilia Romagna, Friuli Venezia Giulia, Lombardy, Veneto, Liguria and Piedmont, school trips and educational visit were suspended as of 25 February.\textsuperscript{ai}

As of March 1, 2020, the suspension of school trips and educational visits was extended to the whole of Italy (Article 4, paragraph 1, letter b).

Also, as of 1 March 2020 in the regions of Emilia-Romagna, Lombardy, and Veneto and for the provinces of Pesaro-Urbino and Savona, suspension of events or initiatives of any nature, of events and of any form of meeting in public venues or in nonordinary private venues (Article 2, paragraph 1, letter c) was enforced. Similarly, in the same area, suspension of all education services and schools of any rank or level was decreed (Article 2, paragraph

\textsuperscript{ac}The provinces of: Modena, Parma, Piacenza, Reggio Emilia, Rimini, Pesaro-Urbino, Alessandria, Asti, Novara, Verbano-Cusio-Ossola, Vercelli, Padua, Treviso and Venice.

\textsuperscript{ad}DPCM 08/03/2020, art. 1, lett. a.

\textsuperscript{ae}DPCM 09/03/2020, art. 1, no. 1.

\textsuperscript{af}DPCM 09/03/2020, art. 1, no. 2.

\textsuperscript{ag}DPCM 22 March 2020, art. 1, lett. b.

\textsuperscript{ah}DPCM 26 April 2020, art. 1, lett. a.

\textsuperscript{ai}DPCM February 25, 2020, art. 1, paragraph 1, lett. b.
1, letter e). As of the same date, openings of museums and cultural venues in the aforementioned regions and provinces was permitted, provided social distancing of at least 1 m could be ensured (Article 2, paragraph 1, letter f).

As of 4 March, all conference and congress activities were suspended throughout the national territory (Article 1, paragraph 1, letter a), as were events and shows held in public or private venues that failed to comply with 1-m social distancing rules (Article 1, paragraph 1, letter b). Finally, as of 8 March this suspension measure was extended throughout, regardless of interpersonal distances (Article 2, letter a).

As of the day after March 4, all education services and teaching activities were suspended throughout the country (Article 1, paragraph 1, letter d).

As of 8 March, suspension of public events or events in private venues was also enforced, and extended to “ordinary” public events, such as theatrical performances, cinemas, pubs, gaming and betting rooms, dance schools and dance clubs, which were enjoined to cease all activity. Museums were also closed to the public.

As of May 17, public events in the open in static form were once again allowed—in compliance with social distancing. Also, as of May 17, museums were allowed to reopen, with prescriptions regarding social distancing between visitors.

In the same Act, reopening of theatrical and cinema halls is envisaged. It will be allowed as of June 15, 2020.

6.1.3.2.3 Restriction of sports activities

As of February 25, 2020, for all municipalities of the Regions of Emilia-Romagna, Friuli-Venezia Giulia, Lombardy, Veneto, Liguria, and Piedmont all sporting events involving a public audience were suspended, with the sole permission to hold events and training behind closed doors. This exception, however, did not apply to the so-called red zones of Codogno and Vo’ Euganeo, for which sporting events or training were banned even behind closed doors.

As of 1 March, suspension of “open door” sporting events was confirmed only for Emilia-Romagna, Lombardy, and Veneto and for the provinces of Pesaro-Urbino, and Savona. Permission to hold events and training behind closed doors was also confirmed, with the exception of red zones. Also as of March 1, 2020, sport supporters residing in the regions

---

a) DPCM 08 March 2020, art. 1, lett. G for Lombardy and other provinces, art. 2, lett. c for the entire national territory.

ak) DPCM 08 March 2020, art. 1, lett. G for Lombardy and other provinces, art. 2, lett. d for the entire national territory.

ai) DPCM 17 May 2020, art. 1, lett. i.

am) DPCM 17 May 2020, art. 1, lett. p.

am) DPCM 17 May 2020, art. 1, lett. m.

ao) DPCM February 25, 2020, art. 1, paragraph 1, lett. a.

ap) DPCM February 25, 2020, art. 1, paragraph 1, lett. a.

aq) DPCM 01 March, 2020, art. 1, paragraph 1, lett. a.
of Emilia-Romagna, Lombardy, and Veneto and in the provinces of Pesaro-Urbino and Savona were banned from traveling to attend “open door” sporting events held in other areas.\textsuperscript{ar} As of the same date ski areas activities were allowed, but with closed transport restrictions aimed at preventing crowding.\textsuperscript{as}

Also as of 1 March in Lombardy and in the province of Piacenza, all activity for gyms, sports centers and swimming pools was suspended (Article 2, paragraph 3, letter a). As of 8 March this closure is also extended to the provinces of Modena, Parma, Piacenza, Reggio nell’Emilia, Rimini, Pesaro-Urbino, Alessandria, Asti, Novara, Verbano-Cusio-Ossola, Vercelli, Padua, Treviso and Venice.\textsuperscript{at}

Throughout the national territory, as of 4 March 2020, “open door” sports events and competitions were canceled, with events and training sessions without an attending public were still permitted (Article 1, paragraph 1, letter c). The activity of gyms, swimming pools and sports centers was allowed provided compliance was ensured with 1-m social distancing rules (Article 1, paragraph 1, letter c).\textsuperscript{au} Events and trainings were suspended throughout Italy as of 1 April 2020.\textsuperscript{av}

As of March 8, 2020, in Lombardy and in provinces with the highest infection rates,\textsuperscript{aw} ski facilities in skiing areas were closed.\textsuperscript{ax}

The lifting of measures started on April 26, with the reopening of public parks and gardens and with the permission to carry out sports activities in compliance with social distancing.\textsuperscript{ay} Competitive training at sports facilities was also allowed to resume.\textsuperscript{az}

Finally, as of 12 June, sporting competitions were allowed to resume behind closed doors throughout Italy.\textsuperscript{ba}

### 6.1.3.2.4 Restrictions to commercial and productive activities

Once again with regard to the Codogno area in Lombardy and Vo’ Euganeo in Veneto, as of 23 February 2020, the following measures were put in place: closure of all commercial activities, with the exception of those for the purchase of basic necessities, public utility or essential public services (Article 1, paragraph 1, letter i); suspension of freight and passenger transport services, including non-scheduled services (Article 1, paragraph 1, letter m); suspension of work activities in the above-mentioned area, with the exception of those providing essential or public utility services and those that may be carried out at home or remotely (Article 1,
paragraph 1, letter n) and, finally, suspension of work activities for workers who reside inside the affected area but work outside the red zone (Article 1, paragraph 1, letter o).

As of March 1, 2020 in the regions of Emilia-Romagna, Lombardy, and Veneto and for the provinces of Pesaro-Urbino and Savona, catering services, bar and pub activities were permitted only for seated customers and in compliance with social distancing rules (Article 2, paragraph 1, letter h).

Also, as of March 1, the remaining commercial activities were enjoined to ensure safe social distancing between visitors (Article 2, paragraph 1, letter i). As of 8 March this prescription was extended to provinces with high infections rates,bb while it took the form of a recommendation for the rest of Italy,bc but was made mandatory for the rest of the country on March 9.

As of March 1, only for the provinces of Bergamo, Lodi, Piacenza, and Cremona, complete shutdown of medium and large shops, commercial establishments inside shopping malls or markets was ordered on Saturdays and Sundays, with the exception of pharmacies and drugstores, as well as grocery stores. As of March 8, this type of shutdown was also extended to the provinces of Modena, Parma, Piacenza, Reggio Emilia, Rimini, Pesaro-Urbino, Alessandria, Asti, Novara, Verbano-Cusio-Ossola, Vercelli, Padua, Treviso, and Venice.bd

As of March 8, 2020 in Lombardy and in the provinces with high rates of infectionbe restaurant and bar activity was permitted only from 6 am to 6 pm,bf while for the rest of Italy safe social distancing must be ensured.bg As of March 9 restrictions were extended to all of Italy.

As of March 11, all nonfood businesses or markets, even outdoors, which did not provide basic necessities were closed.bh As of the same date, bars and restaurant businesses are also shut down, with the exception of home delivery.bi Hairdressers and beauty parlors were also suspended.bj

A further squeeze occurs on March 22, with the closure of all industrial and commercial production activities, with the sole exclusion of activities deemed relevant to address the emergencybk and of the activities instrumental to the latter, subject to prior communication by the Prefecture.bl

Reopening of nonfood commercial activities and catering services, as well as of personal care services (hairdressers and beauticians) took place from May 17, 2020.

Finally, on June 11, gaming and betting rooms reopened, unless otherwise specified by the Region.

bbDPCM 08 March 2020, art. 1, lett. o.
bcdPCM 08 March 2020, art. 2, lett. f.
bDPCM 08 March 2020, art. 1, lett. r.
bc The aforementioned provinces of: Modena, Parma, Piacenza, Reggio Emilia, Rimini, Pesaro e Urbino, Alessandria, Asti, Novara, Verbano-Cusio-Ossola, Vercelli, Padua, Treviso and Venice.
bfDPCM 08 March 2020, art. 1, lett. n.
bDPCM 08 March 2020, art. 2, lett. e.
bhDPCM 11 March 2020, art. 1, no. 1.
bDPCM 11 March 2020, art. 1, no. 2.
bjDPCM 11 March 2020, art. 1, no. 3.
bkDPCM 22 March 2020, art. 1, lett. a.
DPCM 22 March 2020, art. 1, lett. g.
6.1.3.2.5 Restrictions on worship activities

Always in the Codogno area in Lombardy and Vo’ Euganeo in Veneto, as of February 23, 2020, suspension of religious services was mandated (Article 1, paragraph 1, letter c).

As of 1 March in the regions of Emilia-Romagna, Lombardy, and Veneto and for the provinces of Pesaro, Urbino and Savona, suspension of religious services was ordered (Article 2, paragraph 1, letter c). The opening of places of worship was permitted provided compliance to 1-m safe social distancing measures could be ensured (Article 2, paragraph 1, letter d). As of 8 March such prescriptions were extended not only to provinces with high infection rates, but also to the rest of Italy. As of April 26, 2020, gradual reopening only allows the celebration of funeral services with a maximum participation of 15 relatives.

Finally, as of May 17, 2020 permission for public worship in compliance with social distancing measures was reinstated.

6.1.3.2.6 Promotion of flexible work

As of February 23, 2020, strategies were put in place to promote work from home via available online technology. Art. 3 of the Decree of the President of the Council of Ministers (DPCM) dated February 23, 2020 mandated that every current employment relationship in the so-called red zone should provide for flexible work, regulated by articles 18 and ff. of 23 law 22 May 2017, no. 81, even in the absence of specific agreements.

This opportunity was later extended from February 25, 2020 to all employers based in the regions of Emilia-Romagna, Friuli-Venezia Giulia, Lombardy, Piedmont, Veneto, and Liguria, as well as to workers residing in the same area who carried out work activities outside these territories.

As of March 1, 2020, permission to resort to flexible work was extended to the whole national territory (Article 4, paragraph 1 letter a).

Also as of March 1, 2020, for the regions of Emilia-Romagna, Lombardy, and Veneto and for the provinces of Pesaro-Urbino and Savona recommendations were issued with regard to favoring remote connection “in the conduct of meetings or conferences” (Article 2, paragraph 1, letter m). Such recommendation was reiterated throughout the national territory on March 8, 2020.

6.1.3.2.7 Public offices and certificates

Always in the Codogno area in Lombardy and Vo’ Euganeo in Veneto, as of February 23, 2020, all public office activities were banned, without prejudice to the provision of essential and public utility services (Article 1, paragraph 1, letter g). As of February 25, 2020, judicial
offices to which the municipalities in question belong were generally closed to the public except for urgent certificates. Reduced schedules were arranged. As of February 25, 2020, in the provinces of Bergamo, Brescia, Cremona, Lodi, Milan, Padua, Parma, Pavia, Piacenza, Rovigo, Treviso, Venice, Verona and Vicenza, driving tests and access to civil motorization offices were suspended, with the provision of an extension of expiration terms for some documents. Such extension was subsequently granted to other areas.

As of March 1, 2020 in the regions of Emilia-Romagna, Lombardy, and Veneto and for the provinces of Pesaro-Urbino and Savona, public and private competitive exams requiring the presence of candidates were suspended (Article 2, paragraph 1, letter g), while for the remaining areas of Italy the need to enforce safe social distancing was asserted (Article 3, paragraph 1, letter f). Such suspension was extended on 8 March also to provinces with high infection rates. As of 9 March 2020, a general suspension was extended to all of Italy.

6.1.3.2.8 Obligations to notify travel

As of 1 February 2020, those who passed through or stopped within the Codogno area in Lombardy and Vo’ Euganeo in Veneto were obliged to notify the competent Local Health Authority (ASL) Prevention Department “for the purpose of adoption, by the competent health authority, of all necessary measures, including active-surveillance home stay.” By Decree of the President of the Council of Ministers (DPCM) dated March 1, 2020, those who entered Italy from epidemic risk areas in the previous 14 days were bound to notify the competent Local Health Authority Prevention Department in order to possibly arrange for health surveillance and fiduciary isolation (Article 3, paragraph 1, letter g and Article 3, paragraphs 2–6).

6.1.3.2.9 Obligation to wear personal protective equipment

As of February 23, 2020, those based in the Codogno area in Lombardy and Vo’ Euganeo in Veneto were the first to be required to wear personal protective equipment (or to adopt specific precautionary measures set out by the Local Health Authority Prevention Department) to access essential public services, as well as commercial establishments (Article 1, paragraph 1, letter l).

\[\text{DPCM 25 February 2020, art. 1, paragraph 1, lett. l. Such provision was confirmed by art. 2, paragraph 4 of DPCM 01 March 2020.}\]

\[\text{DPCM 25 February 2020, art. 1, paragraph 1, lett. f and g.}\]

\[\text{DPCM 01 March 2020, art. 1, paragraph 1, lett. o.}\]

\[\text{Modena, Parma, Piacenza, Reggio Emilia, Rimini, Pesaro-Urbino, Alessandria, Asti, Novara, Verbano-}\]

\[\text{Cusio-Ossola, Vercelli, Padua, Treviso and Venice.}\]

\[\text{DPCM February 23, 2020, art. 2.}\]
6.1.3.3 Measures applied to those who were already deprived of personal freedom

With regard to those expected to go to prison or to minor correctional facilities, especially if coming from the Codogno area in Lombardy or Vo’ Euganeo in Veneto, a health protocol was to be set up as of February 25, 2020.bw

The need to limit contagion in prisons or similar facilities by implementing adequate safeguards and enforcing protocols was repeatedly affirmedbx even later.

In the regions of Emilia-Romagna, Lombardy, and Veneto and for the provinces of Pesaro-Urbino and Savona, Decree of the President of the Council of Ministers (DPCM) dated 1 March 2020 called for “severe restriction” of visitor access to guests in Nursing and Residential Care Facilities.

As of 4 March, throughout the national territory, access of relatives and visitors to family members in the hospitality and long-term hospitalization facilities, in assisted healthcare residences or residential facilities for the elderly could be restricted by the facility’s health management (Article 1, paragraph 1, letter m).

Finally, as of March 1, 2020, in the regions of Emilia-Romagna, Lombardy and Veneto and for the provinces of Pesaro-Urbino and Savona, hospital health departments were asked to restrict visitor access to hospitalization areas (Article 1, paragraph 1, letter j).

As of March 4, 2020, throughout the national territory, it was expressly forbidden for people accompanying patients to wait in emergency rooms (Article 1, paragraph 1, letter l).

6.1.3.4 Regional and local measures to contain infection

As mentioned above, management of health emergencies generally also entails a concurrent ruling power on the part of Region Governorsby and Mayors of municipalities.bz

In emergency legislation proper to the onset phase of the epidemic, the legislator endeavored to rank the various administrative sources of production of contagion containment provisions, assigning a prominent role to the decrees of the President of the Council of Ministers. The art. 3, paragraph 1 of the Legislative Decree February 23, 2020, no. 6 entrusts the implementation of containment measures envisaged to the President of the Council of Ministers following a summary participatory procedure.ca Only “pending adoption” of Decrees of the President of the Council of Ministers (DPCMs), in cases of “extreme necessity and urgency,” can the bodies of local authorities adopt the ordinances mentioned.cb

bwDPCM February 25, 2020, art. 1, paragraph 1, lett. m.

bxDPCM 04 March 2020, art. 1, paragraph 1, lett. p.

byArt. 32 of Law 23 December 1978, no. 833.

bzArt. 50 of Legislative Decree no. 267/2000.

caIn fact, the decree may be adopted “upon proposal of the Minister of Health, after consulting the Minister of the Interior, the Minister of Defense, the Minister of Economy and Finance and other Ministers competent for the matter, as well as the Presidents of competent Regions, in the event that they exclusively concern a single region or some specific regions, or the President of the Conference of Region Presidents, in the event that they concern the national territory” (art. 3, paragraph 1 of Legislative Decree February 23, 2020, no. 6).

cbArt. 3, paragraph 2 of Legislative Decree 23 February 2020, no. 6.
Following the adoption of a flood of local ordinances, the legislator, by Legislative Decree March 2, 2020, no. 9 urgently established that “following the adoption of State measures to contain and manage emergency […], contingent and exceptionable ordinances aimed at dealing with the aforementioned emergency may not be implemented and, where implemented ought to be considered invalid as against State measures.”

This requirement was reaffirmed by Legislative Decree March 25, 2020, no. 19 which sanctioned regional competence temporally, solely “pending the adoption of decrees of the President of the Council of Ministers […] and with limited effectiveness until that moment” and exclusively “in relation to specific supervening situations of aggravation of the health risk that occurred in their territory or part of it.” In such cases, Regions “may introduce further restrictive measures […] exclusively in the context of the activities within their competence and without affecting production activities and those of strategic importance for the national economy.”

Even more restricted is the competence area of Mayors, since a municipal body may not adopt, “under penalty of invalidity, extraordinary and urgent ordinances aimed at facing an emergency in contrast with State measures, nor exceeding the limits” provided for State regulations.

It was asked how one could discern, in this specific context, the “contrast” between local ordinances and State provisions: in a nutshell, administrative law has—in general terms—acknowledged the legitimacy of local ordinances which were more restrictive than national ordinances, with limited exceptions for notably sensitive issues of exclusive state competence.

6.1.4 Italian measures in a space–time perspective

Overall, Covid-19 contagion containment measures in Italy may be traced back to a space–time interpretative model, taking into account the three phases whereby the epidemic spread and their impact on territory. In fact, as shown in the Fig. 6.2, political containment measures chart an evolution over time which reflects the three phases of contagion spread: the onset, epidemic and endemic phases.

The first phase—the onset phase—emerged when definite and full-blown cases of Covid-19 contagion were recorded. That lead the Italian government to declare a state of emergency by the Legislative Decree no. 4 of February 6, 2020. As marked on the map by Art. 35 of Legislative Decree 8 March 2020, no. 9.

Art. 3, paragraph 1 of Legislative Decree 25 March 2020, no. 19.

Art. 3, paragraph 1 of Legislative Decree 25 March 2020, no. 19.

Art. 3, paragraph 2 of Legislative Decree 25 March 2020, no. 19.

As in the case of immigration or the lockdown of means of transport.

We refer here to the theoretical-methodological approach outlined by Emanuela Casti in the introduction to this volume, which breaks down the evolution of Covid-19 infection in Italy into three phases, namely: the onset phase, when first cases, either suspect or overt, are recorded; the epidemic phase, when infection spreads rapidly throughout the entire community; the endemic phase, when the number of infected individuals decreases but does not disappear. For a full treatment of this issue, see also: Casti (2020), pp. 65–66.
a white line, such measure affected the entire Italian territory and followed the initial onset of Covid-19.

The second phase—the epidemic phase—ensued as the spread of contagion grew exponentially and triggered restrictions which applied to different territorial contexts: definition of the so-called “red zone,” following DPCM February 23, 2020, in the Municipalities of the Codogno area\footnote{As specified above, these are Municipalities located near Codogno: Bertonico, Casalpusterlengo, Castelgerundo, Castiglione D'Adda, Fombio, Maleo, San Fiorano, Somaglia and Terranova dei Passerini.} in Lombardy and in the Municipality of Vo’ Euganeo in Veneto, color-coded in gray lines on the map, which banned movement into or from the area, preventing people’s mobility; restriction of educational, community and collective recreational activities via DPCM February 23, 2020 for the Regions of Emilia-Romagna, Friuli-Venezia Giulia, Liguria, Lombardy, Piedmont and Veneto, color-coded in red on the map; finally, extension of restrictions to the whole Italian territory—color-coded in light gray on the basemap—via multiple national provisions issued in close succession starting with the Decree of the President of the Council of Ministers dated March 1, 2020.

Finally, following Covid-19 containment measures, an endemic phase ensued, which may be traced back to DPCM dated May 4, 2020, whereby local circulation was reopened, and to DPCM dated 18 May, 2020, which allowed free circulation between regions. Such phase, marked on the map with a double black line, also concerns the entire Italian territory.

\textbf{FIG. 6.2} Evolution of the containment measures in Italy in February and March 2020.
In sum, reflexive cartography (Casti, 2015) makes it possible to envisage a space–time analysis of measures activated in the Italian territory to contain the Covid-19 epidemic in the months under study, i.e., between February and June 2020. Such cartography highlights: initial containment measures upon emergence of contagion, which affect the entire national territory; more stringent measures in the epidemic phase, which are gradually extended from an initial “red zone” area to the regions most affected and eventually to the entire national territory; and, finally, a progressive lifting of restrictions throughout the national territory as the infection starts to decrease and an endemic phase is reached. This type of cartography uses reflexive color-coding to provide an effective graphic visualization of evolving political measures over months: white marks the initial alert phase; various shades of gray refer to the period of maximum emergency, in relation the many territories affected; black marks a virtual return to normality as containment measures decrease.

Overall, reflexive cartography provides a bird’s eye view of the measures adopted. In particular, it enables researchers to analyze the measures deployed in Italy to limit the Covid-19 epidemic in a space–time perspective, by cross-referencing them to the stages of contagion.

6.1.5 Conclusions

Analysis of the measures adopted makes it possible to convey the features of a wider framework of operable restrictions, definable in terms of the categories involved and arranged at multiple institutional and territorial levels. With an eye on the assessment made by the EU (EU, 2020), in an effort to draw up a roadmap for alleviating restrictions—which in fact may also be taken in terms of an actual tightening of measures—we can outline a few major areas of restriction:

– restrictions on the circulation of people and goods throughout the territory:
  - closure/reopening (to be applied gradually) of EU internal and external borders for the movement of goods;
  - closure/reopening (to be applied gradually) of EU internal and external borders for the movement of people;
  - measures of restriction/reopening of national domestic circulation, between regions, entry/exit protocols for delimited areas (isolated controlled zones);

– restrictions on activities, broken down on the base of separate activity categories:
  - schools for infants, children, teens, and adults; levels to be broken down according to varying degrees of learners’ self-sufficiency in either classroom or online schooling;
  - commercial activities, which may be broken down by size and format, and along different modes of aggregation in trade clusters or networks;
  - social and hospitality activities, restaurants, bars, theaters, cinemas, hotels, sports centers, which may be broken down according to economic sustainability in the application of health safety measures;
  - social, promotional, recreational activities connected to events (fairs, parties, major concerts, …).
The gradual reopening of economic and socioeducational activities will of necessity consider either the maintenance or subsequent lifting, in gradual steps, of social distancing measures and of health and safety rules in workplaces.

Analyses conducted on the dynamics of diffusion/intensity of contagion and on the countermeasures adopted in different contexts, must be related to distinctive territorial features (Walker et al., 2020). The demographic and social setup, the availability and quality of health care combine and substantially affect the impact of measures to contain viral spread. Given our as yet partial knowledge of contagion dynamics, it is arduous to assess the effectiveness of the range of measures which may be adopted as outlined above.

While our understanding remains for now incomplete, we may advance two main considerations with regard to the range of policies and decision-making tools authorities may decide to adopt. The first concerns a highly complex field of tension, generated by the search for the best possible trade-off between measures to restrict economic and social activities, which have (negative) effects on the well-being of individuals and the collective, and the concerns of public healthcare, which benefits from diminished contagion exposure. While it remains hard to discern a clear action scenario or to envision effective intervention, one second note worth considering has to do with the importance of timeliness for effective epidemic containment: “(...) In the absence of a vaccine, all governments are likely to face challenging decisions around intervention strategies for the foreseeable future. However, the still relevant counter-factual of a largely unmitigated pandemic clearly demonstrates the extent to which rapid, decisive, and collective action remains critical to save lives globally” (Walker et al. 2020, p. 422).

Along these lines, within a European context that—between February and June 2020—struggled to develop coordinated and homogeneous sets of political intervention, reflexive mapping serves to highlight the speed of intervention in Italy, where contagion containment policies are progressively modified as infection evolves: from an onset phase which recorded the first cases; to the epidemic stage which saw an exponential rise in contagion; and, finally, to the endemic phase as contagion is gradually contained. Ultimately, reflexive cartography is an effective tool for guiding a spatio-temporal analysis of the epidemic closely tied to the measures adopted by individual states. In particular, it highlights the pioneering role of Italy in the European context as a political reference model for emergency management.

References
Casti, E., 2015. Reflexive Cartography: A New Perspective on Mapping. Elsevier, Amsterdam-Waltham.
Casti, E., 2020. Geografia a ‘vele spiegate’: analisi territoriale e mapping riflessivo sul Covid-19 in Italia. Documenti Geografici, pp. 61–83.
Daniele, L., 1989. voce Circolazione delle merci nel diritto comunitario in Digesto delle discipline pubblicitistiche. Utet, Tourin.
European Commission-Directorate-General for Communication, 2020. A European Roadmap to Lifting Coronavirus Containment Measures. https://ec.europa.eu/info/sites/info/files/factsheet-lifting-containment-measures_en.pdf.
European Council, 2020. Covid-19 Coronavirus Outbreak and the EU’s Response. https://www.consilium.europa.eu/en/policies/coronavirus/.
Flaxman, S., et al., 2020a. Report 13: Estimating the number of infections and the impact of non-pharmaceutical interventions on Covid-19 in 11 European countries. In: Imperial College Covid-19 Response Team.
Lumet, S., Enaudeau, J., 2020. Organisation du territoire européen en temps de Covid-19, entre coopération et repli. Le Grand Continent. https://legrandcontinent.eu/fr/2020/04/01/organisation-du-territoire-europeen-en-temps-de-covid-19-entre-cooperation-et-repli/.

Rossi Dal Pozzo, F., 2012. voce Circolazione e soggiorno nell’Unione europea in Digesto delle discipline pubblicistiche. Utet, Tourin.

Walker, P.G.T., et al., 2020. The impact of Covid-19 and strategies for mitigation and suppression in low- and middle-income countries. Science 369, 413–422.

Further reading

Allain-DuPré, A., et al., 2020. The Territorial Impact of Covid-19: Managing the Crisis Across Levels of Government. OECD. https://read.oecd-ilibrary.org/view/?ref=128_128287-5agkojaa&title=The-territorial-impact-of-covid-19-managing-the-crisis-across-levels-of-government.

Camera dei Deputati-Servizio Studi, 2020. Misure sull’emergenza coronavirus (Covid-19)–Quadro generale.

Chopin, T., Koenig, N., Maillard, S., 2020. The EU Facing the Coronavirus. A Political Urgency to Embody European Solidarity. Policy Paper, vol. 250 Jacques Delors Institute, Notre Europe, pp. 1–8.

Flaxman, S., et al., 2020b. Estimating the effects of non-pharmaceutical interventions on Covid-19 in Europe. Nature 584, 257–261. https://doi.org/10.1038/s41586-020-2405-7.

Gressani, G., 2020. Le Coronavirus à l’échelle régionale. Le Grand Continent. https://legrandcontinent.eu/fr/2020/03/17/le-coronavirus-a-lechelle-pertinente/.

Lapatinas, A., 2020. The Effect of Covid-19 Confinement Policies on Community Mobility Trends in the EU. EUR 30258 EN, Publications Office of the European Union, Luxembourg, https://doi.org/10.2760/875644.