Making a difference: the effects of institutional resilience in society during COVID-19

Sergiu Gherghina1 · Clara Volintiru2 · Throstur Olaf Sigurjonsson3

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Abstract
The COVID-19 crisis and countries' reactions led to analyses about how governance systems influenced the management of the pandemic and how COVID-19 influenced businesses. The concept of institutional resilience transcends these directions of research, but we know little about what it means and how to measure it. This paper proposes an innovative framework to conceptualize and assess institutional resilience based on three organisational traits: preparedness, agility and robustness. This approach provides the opportunity to sequence actions before, during and after the pandemic. This framework will be applied through various cases studies in Europe in the contributions to this symposium.

Keywords Effects · Europe · Institutions · Resilience · Societies

Introduction
The COVID-19 crisis serves as a natural experiment to investigate institutional resilience across different types of institutions in various countries. European and national policymakers have become increasingly concerned with the extent to which economies are resilient. The government measures shaping our economies, and the involvement of private companies in local communities during COVID-19, open the

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Sergiu Gherghina
sergiu.gherghina@glasgow.ac.uk

Clara Volintiru
clara.volintiru@gmail.com

Throstur Olaf Sigurjonsson
olaf@hi.is

1 Department of Politics and International Relations, University of Glasgow, Glasgow, UK
2 Department of International Business and Economics, Bucharest University of Economic Studies, Bucharest, Romania
3 Faculty of Business Administration, University of Iceland, Reykjavík, Iceland
door to a research agenda about how institutional resilience can create a broader impact in society. Several studies link societal resilience to the economy and security (Allenby and Fink 2005; Rose 2017). An important focus has been on city resilience, as community-based interactions proved a rich and relevant avenue of interdisciplinary approaches to the topic (Vale and Campanella 2005; Dzigbede et al. 2020). So far, institutional—especially in terms of public institutions—and business resilience have been studied in isolation, with limited efforts to link these two variables. This link is important because it can provide a better understanding of how the public and private sector contributes to societal recovery after crises.

To address this gap in the literature, this symposium has two main goals. First, it develops an analytical framework that conceptualizes and measures institutional resilience across both the public and private sectors (thus including businesses). The framework is an extension of the private–public partnership, studied in new public management, and has broad applicability because its analytical dimensions are not context sensitive. Second, with the help of this framework, the symposium tests empirically the effects of institutional resilience in society during the COVID-19 pandemic. It provides evidence from five case studies/countries from the Economic European Area: Croatia, Iceland, Lithuania, Romania and Spain. They were selected due to the variation in institutional experience with crises and various degrees of democracy, which can influence the public sector response to crises (Engler et al. 2021). This introductory article outlines the theoretical foundations of the framework and explains the indicators that will be covered by each contribution.

The following section provides a brief review of the literature about institutional resilience to COVID-19 and long-term sustainable development and explains the theoretical contribution of this symposium to the existing literature. The third section suggests an analytical framework and a measurement of institutional resilience. It emphasizes the advantages of this measurement for the broader field of study. The final section outlines the applicability of this framework to the five cases included in this symposium.

**Institutions and COVID-19**

Research about COVID-19 has flourished since the beginning of the pandemic in the spring of 2020. Two areas of research were prominent: the ways in which public institutions managed the pandemic and how COVID-19 influenced businesses. The general lines of research are briefly discussed in the following sub-section. The second sub-section outlines what is missing from this line of enquiry and how this symposium fills the void in the literature.

**Efficiency, legitimacy and resilience during COVID-19**

The COVID-19 crisis favoured the emergence of debates about the capacity, functions and appropriate power of governments and public institutions. A central element of these discussions is the balance between effectiveness and legitimacy in
crisis management. The literature covers in broad strokes the extent to which different political or administrative contexts were equipped to react promptly and efficiently to the crisis. Cross-national comparisons show differences in administrative contexts that are apparently similar such as Switzerland and the UK, some of the Visegrad Four countries, Belgium and the Netherlands, or France, Germany and Sweden (Gaskell and Stoker 2020; Pattyn et al. 2020; Hajnal et al. 2021; Kuhlmann et al. 2021). The quality of governance was linked with the capacity to manage the healthcare crisis at national level (Zakaria 2020) and with some COVID-19 indicators at subnational level (Charron et al. 2021).

The intergovernmental relations—the quality of the “transmission belt” between different governance levels—influenced how the crisis was managed (Gaskell and Stoker 2020). There were several instances in which the political opportunism influenced the institutional reactions to the COVID-19 crisis. This was particularly visible in Central and Eastern Europe where national leaders used the pandemic to take away resources from the opposition or to augment their powers (Coman and Volintiru 2021; Hajnal et al. 2021). Unlike the popular outrage regarding the centralisation of powers in Eastern Europe, in Western democracies, the crisis management led to higher public support for incumbent governments (Rapeli and Saikkonen 2020).

In parallel, a body of research on resilience started to develop with particular emphasis on business. Economic resilience refers to the policy-induced ability of an economy to recover from, or adjust to, the negative impacts of adverse exogenous shocks and to benefit from positive shocks. This happened mainly because the private sector was severely hit by COVID-19 with markets dropping by double digits in the first year of the pandemic and unemployment soaring across the globe. The IMF estimated a global economic decline of 4.4%, comparable to the global financial crisis of 2008. Some sectors were more affected than others with travel restrictions affecting severely tourism and service sectors. The disruptions in global chains of production left manufacturing companies in such sectors, such as automotive production, with severe shortages in key components. In contrast, many emerging business sectors benefited from expansion of digitalisation (e.g., retail companies, ITC platforms). In essence, business resilience—similar to societal resilience—is the ability to survive and recover after a crisis (Rose 2017). In the attempt to explain the processes associated with resilience, previous research refers to both the ability to adapt and to transform business to survive, i.e. “robust transformation” (Lengnick-Hall and Beck 2005). In the management studies literature, resilience is illustrated through organisational traits and strategies (Linnenluecke 2017). Business resilience in tourism was linked to the post-disaster organisational and environmental elements that contributed to the recovery of such companies in tourism-intensive regions (Luthe and Wyss 2014; Orchiston et al. 2016). An important contribution of this literature shows the ways in which local communities contributed to the business resilience of local companies (Dahles and Susilowati 2015), while other studies look at business resilience through the lenses of the local business environment (Simmie and Martin).

The COVID-19 context brought to the forefront the vulnerabilities in the global value chains (Aldighetti et al. 2021; Gereffi et al. 2021). While many scholars of globalisation signalled out the vulnerability of inter-dependency in the face of
large-scale crises, little empirical evidence was available to test these predictions before COVID-19. Supply shortages manifested in various economic sectors but were probably most acute in the healthcare sector (Ranney et al. 2020).

**Theoretical contributions of this symposium**

This brief review shows how much research discusses how internal organisational structures, decision-making processes, endowments, or external environments contribute to resilience. In doing so, the literature covers institutional and business resilience in isolation with an implicit distinction between the public and the private sectors. Earlier research focuses on institutional resilience in governance (Lowndes and McCaughie 2013; Joseph and McGregor 2020) or markets (Simmie and Martin 2010). However, with a few notable exceptions that link economic resilience to good governance (Briguglio et al. 2009; Aligica and Tarko 2014) there is a significant gap in the literature regarding how both public institutions and private companies have an impact on society. This is an especially important avenue of research in the context of COVID-19 when so many vulnerabilities in both public and private sectors require mutual support. This symposium takes one step further and links the institutional and business resilience. Our argument is consistent with those provided by the new public management literature according to which the public–private partnership can improve the performance and service delivery of public institutions using the private sector management methods (Ferlie et al. 1996; Lane 2000).

The symposium brings two contributions to the existing literature. First, it provides a common framework of assessment for all stakeholder organizations—public and private institutions alike—to understand resilience. It illustrates how the conceptual development of the cooperation between the state and private companies in a crisis context such as COVID-19 pandemics can better explain the variation in responses. In the aftermath of the global financial crisis, a call for a broader accountability of private sector actors emerged in many societies. As a result, even before COVID-19, a new economic model started to take shape, centred on a stronger cooperation between public and private stakeholders to meet collective, societal challenges. Approaches in economics define the basis on which stakeholder engagement can lead to a new social contract (Shafik 2021) and how it can redefine the relationship between private and public institutions (Mazzucato 2021). This symposium proposes one conceptual possibility to look at this relationship.

Second, the approach used in the symposium disaggregates the analysis at the level of institutions. So far, most research discusses resilience as a general feature that may overlook specific characteristics or processes. For example, the Ministry could be influenced by the administrative and political environment in a country, but it is also a stand-alone organisation that can have a level of performance depending on intrinsic capabilities and vulnerabilities. The latter is derived from the literature on private institutions. Along these lines, the contributions add to a broader interdisciplinary body of the literature covering business resilience: e.g. the tourist sector in Croatia or the health sector in Romania or Spain.
Institutional resilience: a new measurement

This symposium develops and applies a novel methodology for institutional resilience that is structured on three dimensions: preparedness, agility and robustness (Table 1). These three indicators are derived from earlier research on institutional management of crises, business resilience, or long-term recovery after crises. Resilience is defined in general as the capacity to react and recover from a crisis. Institutional resilience is defined in this symposium as the capacity of an institution to resist, adapt and recover its functions and structures after a crisis. The three indicators are consistent with this definition. We suggest that institutional resilience can be seen as a continuum of what a given organisation did in preparation for a crisis (preparedness), how fast it reacted once a crisis occurred (agility), and to what extent did the organization survive or was able to maintain its activity after the crisis (robustness). The indicators provide a basic scheme that can be used to assess resilience qualitatively in a systematic way across institutions. Table 1 includes details about the key questions that can be answered to provide an assessment on each dimension of resilience. The score on the last column is a suggestion about where to position the institution and not a statistical correspondent of the questions. We do not have five questions that can be coded dichotomously, and thus, the score is an additive scale from 0 to 5. We use this score for comparisons across countries in this symposium and as eventual starting point for further operationalisation.

The extent to which an institution allocates its resources to prepare for a potential crisis is one of the key dimensions of institutional resilience. In our evaluations of institutional preparedness, we account for both intrinsic factors, such as vulnerabilities derived from the field of activity (e.g. healthcare), and for agency factors, such as risk management strategies. The institutional preparedness dimension is rooted in the disaster management literature (Paton and Johnston 2001). It is a relevant feature of resilience in public healthcare institutions (Nelson et al. 2007; Khan et al. 2018). In the business sector, past studies point to the extent to which a viable business model, before the crisis, had an impact

| Indicator   | Key questions                                                                 | Score  |
|-------------|-------------------------------------------------------------------------------|--------|
| Preparedness| How did the institution prepare for a crisis before COVID-19? Did the institution have plans for risk-management? Did its activities present risks relative to a potential crisis? | 1–5    |
| Agility     | How fast did the institution react to the COVID-19 crisis (including evolving situations)? Was it structured to adapt quickly to unexpected circumstances? How easy did the institution address (some issues of) the crisis? | 1–5    |
| Robustness  | How vulnerable was the institution to a potential crisis/pandemic? Was it hit (did its activities suffer) more than other institutions? To what extent it started the recovery / it recovered from the crisis? | 1–5    |

The score is ascending from low (1) to high (5)

Institution can mean company when applying the framework to the private sector
to a large extent on the way an organisation can manage the crisis (Gittell et al. 2006). It can refer to both the resources of an organization (e.g. staff, equipment, capital) as well as the processes it has set up (e.g. standards, risk management procedures). New contributions covered specifically the context of the COVID-19 pandemic (Ranney et al. 2020).

The institutional agility dimension is much closer to the business literature on organisations. It has gradually evolved in a literature stream focussed on the uncertainty of the business environment (McCann and Selsky 2012). Contributions focussed specifically on the COVID19 context more recently in the field of private companies (Miceli et al. 2021), global supply chains (Ivanov 2020; Aldrighetti et al. 2021). Costs of resilience and disruptions in supply chain network design models or even healthcare institutions specifically (Suresh et al. 2021). We look at the agility of an institution as a second key dimension of resilience. This covers the speed of reaction to the crisis context (e.g. emergency measures) and the adaptability in the face of uncertainty and prolonged challenges (e.g. remote work). Some institutions might be structured to react more promptly due to their efficient organisation or centralised decision-making, while others show institutional resilience through strategic choices taken during a crisis.

The institutional robustness dimension is informed by a larger body of research on environmental inter-dependencies or shared vulnerabilities. It is specifically linked to aspects related to risk management (Scholz et al. 2012) and the ability of a system to survive (Lengnick-Hall and Beck 2005). Building on the existent literature, robustness or institutional survival can also be seen as a concomitant factor of the previous resilience dimensions, as it requires preparedness (Gittell et al. 2006) or agility (Aldrighetti et al. 2021). We argue that the extent to which an organisation is robust is essentially a distinctive dimension of institutional resilience because COVID-19 proved that even agile organisations can face limitations in their business model (e.g. tourism), or well-prepared public institutions faced unexpected external threats (e.g. shortage of medical supplies). We evaluate robustness as a separate criterion that illustrates how an institution survives and recovers in the face of both internal and external threats. It provides the ultimate test of its capabilities and helps us understand if it is able to prosper or make a strong contribution to society after the crisis. While constituent factors of robustness are similar for all organisations, this evaluation criterion can lead, however, to different metrics of survival and success for public institutions (e.g. trust, legitimacy, budgetary capacity) and private institutions (e.g. market share, sales, profits).

These three analytical dimensions for institutional resilience provide several benefits. First, it helps us understand the extent to which an institution can survive a crisis or changes throughout a crisis. We do this by assessing simultaneously the capacity to recover from a crisis (robustness) and to adapt to the new environment circumstances (agility). Second, we can develop a chronological assessment, by looking at pre-crisis capabilities of an organisation (preparedness), during crisis (agility) and after-crisis (robustness). Finally, this conceptual framework allows us to assess the extent to which institutional resilience can lead to a long-term or ad hoc positive impact in society.
Resilience in Europe: structure and content of the symposium

The symposium gathers five contributions that cover case studies in the form of countries belonging to different categories: EU and non-EU members, from both Eastern and Western Europe, new and old democracies. We use a cross-national setting to evaluate the capacity to mediate the negative impact of a crisis in both public and private institutions in Croatia, Iceland, Lithuania, Romania and Spain. Building on a common methodology that accounts for both organizational factors and public impact, we look at the effect of (a) public institutions (ministries) in charge of healthcare, education, or economic policy and (b) private companies in manufacturing, retail or services. We provide insights into a new level of analysis that is relevant to both the academic debate and the broader political decision-making process. The case studies show that a meso-level of analysis, i.e. the organization level, is necessary for resilience research as national systems do not always reflect the capacity or vulnerability of institutional actors.

Each contribution applies the analytical framework outlined in this paper and assesses qualitatively the performance of specific institutions on the three indicators. The first three contributions focus on the health system and reveal different realities about institutional resilience. The article about Lithuania illustrates how the public and private services were uncoordinated and resulted in vulnerability. Such a cooperation would have been desirable because COVID-19 required larger healthcare facilities and capabilities than what the public sector possessed and coordinated action that the private sector could not deliver on its own. The article about Spain shows the reverse side of the medal and illustrates how the cooperation between health and social services authorities and the initiative of long-term care facility managers could address the initial problems and reverse the fragile situation of the long-term care facilities’ for better readability. The contribution on Romania also addresses the healthcare and shows how the engagement of community stakeholders complemented public efforts in managing the pandemic. Such an institutional approach compensated for systemic vulnerabilities and adds to societal resilience in times of crisis.

The article about Iceland also tells a story about the public–private partnership but goes in a slightly different direction: the cooperation boosted the nation’s trust in institutions and placed science at the forefront of pandemic management. The country’s decision to screen and test large portions of the population early on and the use of extensive information to build scientific knowledge was broadly acclaimed. By looking at the tourism sector in Croatia, the last contribution to the symposium illustrates how even the most affected economic sectors can survive the crisis. One important finding of the analysis is that the agility and robustness in addressing the crisis were possible through the involvement of private companies and civil society. This involvement allowed for swift reactions that stabilized the situation and improved communication with the public.

The contributions in this symposium reflect two broad debates in the literature. Looking at public sector institutions, such as healthcare systems, the authors assess to what extent there has been a trade-off between efficiency (i.e.
centralisation) and legitimacy (i.e. transparent, due process). We argue that this trade-off is only apparent in some cases, as in the case of Romania where we find that the centralisation of the decision-making process has been reconciled with legitimacy through large-scale stakeholder cooperation. Secondly, we look at the extent to which private sector institutions have emerged stronger after the crisis. The findings of the symposium illustrate that the most resilient institutional actors, both from the public and the private sectors, have significant engagement with society and contribute to developing a broader societal resilience.

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Sergiu Gherghina is Associate Professor in Comparative Politics, Department of Politics and International Relations, University of Glasgow. His research interests lie in party politics, political participation, democratization and direct democracy.

Clara Volintiru is Associate Professor at the Bucharest University of Economic Studies (ASE), and her work previously appeared in CESifo Economic Studies, European Political Science Review, Research & Politics, or Acta Politica.

Throstur Olaf Sigurjonsson is a professor at University of Iceland. His research on corporate governance, business ethics, policymaking and policy implementation was published in more than 60 articles, books and book chapters in the last decade.