Government financial resilience - a European perspective

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Government financial resilience – a European perspective

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ABSTRACT

In a context where crises and shocks are becoming frequent, governments increasingly need to be aware of their financial resilience and its underlying dimensions. This chapter proposes a framework for understanding and assessing the financial resilience of municipalities, by jointly considering how types of shocks, financial vulnerabilities, anticipatory capacities, and coping capacities dynamically intertwine to shape responses to crises, and financial and non-financial performance. The chapter also highlights the main features of these dimensions in municipalities in the largest European countries (France, Germany, Italy and the UK), under recent crises. Finally, it reflects on how this research can inform practice and policy through the development of a governmental financial resilience toolkit.

Keywords: financial resilience, local government, municipalities, Europe, financial vulnerability, crisis

1. Introduction

Governments across the world are continuously faced by the adverse impacts of crises and incidents. Over the last two decades, for example, they have coped with the emergencies caused by migration, and particularly refugees' movements (Wadsworth et al., 2016), the global financial crisis and the ensuing climate of austerity affecting many countries (Kickert, 2012, Hastings et al., 2015; Steccolini et al., 2017), and the recent coronavirus (COVID-19) pandemic waves (Ahrens and Ferry, 2020; 2021; Anessi Pessina et al., 2020; Leoni et al., 2021). Such crises have important financial reverberations, in that they generally affect public finances negatively, while requiring financial interventions and responses. In light of these phenomena, an emerging body of research in public sector financial management has highlighted the ways in which governments and public sector organizations respond to crises, shocks, and austerity. For example, extensive knowledge has been accumulated on the types of responses adopted by governments in the face of the global financial crisis (see Dougherty et al., 2009; Scorsone and Plerhoples, 2010; Baker 2011; Kickert, 2012; Kickert et al., 2013; Overmans and Noordegraaf 2014; Barbera et al., 2015), and of the COVID-19 pandemic (for syntheses, see Grossi et al., 2020; Leoni et al., 2021, 2022).

The studies focusing on governmental responses to crises allowed an important accumulation of contextual knowledge on the ways in which governments responded to specific crises. Yet, while the occurrence of crises appears to have become a constant feature of the context where governments operate, and their central role in economies coping with crises is hardly questioned (Steccolini, 2019), governmental preparedness for future crises remains uncertain. For example, at the moment of writing, climate change and environmentally unsustainable choices, future pandemics, rising

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inequalities and unrest of our societies are often highlighted as possible “wicked issues” making future crises and shocks more likely (Pollitt, 2015; Blondin and Boin, 2017; Boin, 2019; Thomasson et al., 2020). This suggests a need not only to understand specific responses and strategies adopted in the face of crises, but also to identify the underlying (and sometimes latent) capacities and dimensions which explain such responses, and make them possible (e.g., Daviter, 2017; Caryannopoulos and McConnel, 2018; Ansell et al., 2020).

Resilience has often been proposed as a useful concept to understand how governments “keep operating even in adverse, ‘worst case’ conditions and adapt rapidly in a crisis” (Hood, 1991: 14). Interestingly, it refers both to the capacity to react to crises efficiently and to absorb shocks, returning to levels of activity and performance which were in place before the crisis (bouncing back) (Meyer, 1982; Wildavsky and Caiden, 1988; Sutcliffe and Vogus, 2003; Boin et al., 2010; Linnenluecke, 2017) and to the capacity to learn and transform, leveraging the crisis as a critical juncture to “bounce forward” (Meyer, 1982; Somers, 2009). In the aftermath of austerity and the global financial crisis, Barbera et al. (2015, 2017) introduced the concept of *governmental financial resilience* to public administration literature, capturing governments’ capacity to anticipate and cope with shocks and difficulties that have an impact on governmental finances. The authors’ framework highlighted the role of four interrelated dimensions in shaping financial resilience, namely (i) financial shocks, (ii) perceived vulnerabilities, (iii) coping, and (iv) anticipatory capacities.

This chapter presents the financial resilience framework, and the operationalization of the underlying dimensions, to suggest future potential uses, in academia and practice. First, the framework can provide the basis for the identification of relevant relationships to be empirically tested among resilience capacities and between them and their possible consequences (e.g., financial and non-financial performance, responses to crises). Second, the framework can be translated into a self-assessment tool to keep track of resilience capacities and perceived vulnerabilities in local governments, so as to support both policymakers and managers in building and nurturing them. Along these lines, the chapter provides insights on the financial resilience dimensions in the local governments of the four largest European countries (France, Germany, Italy and the UK), and illustrates how the framework can be translated into a self-assessment tool.

Following the aim of the present chapter, in a first step, the overall governmental financial resilience framework is presented with details on the definitions and the operationalization of the financial resilience dimensions. The specific country context of France, Germany, Italy and UK, where data at the Municipalities level have been collected, is then presented. Based on the findings from qualitative and quantitative (survey), the chapter then provides an illustration of the resilience dimensions development and at last, a discussion of the possibility of using these results for the development of a toolkit for practitioners and policy makers, before concluding reflections are drawn.

2. Governmental Financial Resilience: the Framework

The framework for governmental financial resilience presented in this chapter builds on the empirical evidence accumulated over the years and across different countries by a plurality of scholars. The first model of governmental financial resilience (Barbera et al., 2017) was developed based on a series of studies of English (Barbera et al., 2015), Italian (Barbera et al., 2016) and Austrian municipalities, further validated through the analysis of 45 cases across 11 countries (Australia, Austria, England, France, Germany, Greece, Italy, the Netherlands, Sweden, US, Brazil) that have been collected in a book edited by Steccolini et al. (2017). Following a multiple case study design including interviews and extensive analyses of archival data, these studies have contributed to further defining and better understanding the dimensions of governmental financial resilience, namely financial shocks, vulnerabilities, anticipatory capacities and coping capacities, as illustrated in the financial resilience framework (see Barbera et al., 2017). The dimensions identified in the multiple country-cases studies were further operationalized into sub-dimensions of anticipatory and coping capacities, and sources and levels of financial vulnerabilities. Figure 1 illustrates the resilience dimensions highlighted by Steccolini et al. (2017) and Barbera et al. (2017). These dimensions are described below. The model in figure 1 identifies relevant relationships that have been already tested empirically (see below), or may be the subject of empirical test in future research.

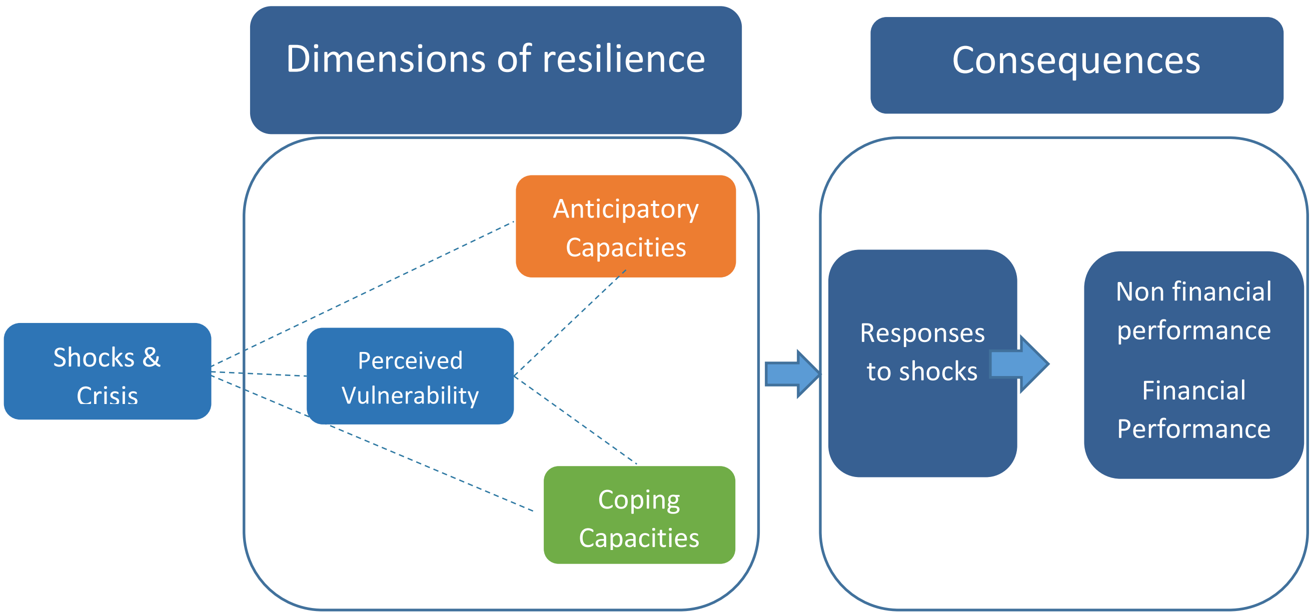


Figure 1 Financial Resilience Framework Dimensions

2.1. Shock/Crises

Crises and shocks are defined as events that take place in the institutional, economic, and social environment in which municipalities operate and that can impact on public sector organizations, affecting their finances. Two major aspects of crises and shocks seem to be particularly significant and have been included in past studies investigating public sector organizations' resilience: severity and surprise. Under the framework presented here, *severity* represents the extent to which unexpected events financially affect an organization, thus the extent to which the financial situation of the organization (or of an individual sub-unit within it) is negatively affected by a crisis or shock. The level of *surprise* represents the extent to which the crisis was unexpected (see Billings et al., 1980; Boin et al., 2005), and thus may constitute rather a shock. In principle, the more such an event hits unexpectedly, the more its financial impact can be disruptive. At the same time, the level of surprise should be interpreted also considering the organizational capacity to be aware of external events (see the section on anticipatory capacities below).

Crises can be seen whether as single one-shot events that negatively affect organizations, or as processes with potentially negative consequences occurring over time. Under the "crisis-as-event" perspective, one cannot completely plan for a such event, which has led to the traditional conception of effective crisis management where the goal is to bring a system back into alignment (Williams et al., 2017: 735). By contrast, in a "crisis-as-process" perspective, crises occur in phases occurring over time where the inability to attend to weak signs of danger built upover time until they triggered a crisis event. In that perspective, the importance of preevent, in-event, and postevent crisis management is highlighted (Williams et al., 2017: 736). It requires considering the antecedents of crises (e.g., organizational weaknesses, vulnerabilities) and the subsequent adjustments and adaptations (i.e., coping strategies).

2.2. Financial Resilience Dimensions

Vulnerabilities

Vulnerability represents the extent to which an organization is exposed to shocks (McManus et al., 2007; Hendrick, 2011, Barbera et al., 2017), and thus the extent to which it can be negatively affected if shocks and crises happen. Internal or external sources of vulnerability can be identified such as organizational, financial, social, demographic, economic, or weather-related conditions (see table 1). Moreover, vulnerability can be measured through some financial or physical indicators, or through perceptions. Perceived vulnerability have been proved to be central in understanding patterns of financial resilience (Maher and Deller 2007, 2011; Jimenez, 2014; Barbera, 2017; in more general, see also Lengnick-Hall and Beck, 2005; McManus et al., 2007; Somers, 2009; Boin et al., 2010; Linnenluecke and Griffiths, 2013). Barbera et al. (2017: 680) suggest that "*the 'endogenization' of vulnerability (i.e., the sense of being able to influence its sources) or its 'exogenization' (i.e., the sense of being unable to control its sources) affected the way in which the financial crisis and the resulting impacts are interpreted and received attention*".

Table 1: Vulnerability: Operationalization and Examples

Dimension	Categories	Definition and examples
Vulnerability	Internal vulnerabilities	Perceived vulnerabilities related to the internal conditions, e.g. organisational or financial factors. Internal financial vulnerabilities may capture different aspects (e.g., Maher and Deller 2011, 2013): • *Robustness:* diversity and stability of own revenue sources, level of reserves • *Autonomy*: level of own revenues sources, freedom to raise taxes • *Flexibility:* debt level, access to loans, rigidity of expenditures

	External vulnerabilities (see also Groves and Valente, 1994)	Perceived vulnerabilities related to the external environment such as *socio-demographic, socio-economic, or economic vulnerabilities as well as local/organizational extreme-weather-related vulnerabilities, and regulation related vulnerabilities*

Anticipatory Capacities

Anticipatory Capacities are defined as the tools and capabilities which enable organisations to better identify, manage, control their vulnerabilities and to anticipate potential financial shocks before they arise (Barbera et al., 2015, 2017, 2021; Steccolini et al. 2015, 2017).

McManus et al. (2007: 1) identify "situation awareness" as a component of organizational resilience and as a "measure of an organization's understanding and perception of its entire operating environment". The awareness of potential shocks affecting public local finances relies, so, on the organizational planning capacity (Erol et al., 2010; Whitman et al., 2013) and its proactivity (Erol et al., 2010; Starr et al., 2003; Bhamra et al., 2011) as both contribute to decreasing the level of organizational vulnerability. Preparedness is, thus, a key aspect of resilience, intended as the ability to manage crises through anticipation and planning practices (McManus et al., 2007; Fleming, 2012; Linnenlueke and Griffiths, 2013; Whitman et al., 2013).

However, anticipation is a multifaceted concept. It requires therefore to be analysed in light of its underlying key processes and tools, especially those which are accounting-based i.e. internal control systems (Ferry et al., 2018), auditing (Bracci et al., 2015), financial management (Anessi-Pessina et al., 2016), and the design of risk assessment strategies/plans to mitigate and minimise the impacts of such shocks (Linnenlueke and Griffiths, 2013). In table 2, we list and define the behavioral and cognitive capacities, and provide examples of how these capacities are operationalized in financial and accounting tools.

Table 2: Anticipatory capacities: Operationalisation and examples

Dimension	Categories	Definition		Financial/accounting operationalization of anticipatory capacities
Anticipatory Capacities	*Internal information Sharing* (Hood 1991; McManus et al., 2007; Skertich et al., 2013; Barbera et al., 2017; 2021)	The ability of members to share valuable information and ideas with colleagues within the organization.		• Simulations to forecast future revenues and expenditure • Facilitating early budgetary approval • Providing continuous monitoring of revenues collected, expenditure, and quantity and quality of services provided • Internal control systems • Auditing • Financial management • Design of risk assessment strategies/plans
	External information Exchange (McManus et al., 2007; Boin and Van Eeten, 2013; Linnenlueke and Griffiths, 2013; Anessi-Pessina et al., 2016; Ahrens and Ferry 2021; Saliterer et al., 2017; 2021)	The extent to which an organization liaises and collaborates with other organizations to inform their approach in dealing with potential shocks.		
	Monitoring (Linnenlueke and Griffiths 2010;2013; Boin and Van Eeten, 2013; Barbera et al., 2021; Saliterer et al., 2021; Ahrens and Ferry 2021)	The conscious process of scanning the internal organization and external environments for possible threats and opportunities, Including *Vulnerability assesment* tools and practices which allows to spot the warning signs of shocks, thereby informing effective medium and long-term decisions (reflecting, adapting, re-strategizing).		
	*Critical Thinking** (Chance 1986; McGrath, 2001; Boin and Hart, 2003; Reagans et al., 2005; Baumard and Starbuck, 2005; Carmeli, 2007; Carmeli and Gittell, 2009; Stern 2009; Vogel, 2012; Collins and Peerbolte, 2012)	The capacity to analyze events, justify decisions, and make comparisons and draw inferences to make informed decisions to sustain and recover from the impacts of future events. Municipalities can engage in critical thinking internally (with their employees), and externally (with peer institutions and stakeholders such as citizens).		

**Critical thinking is borrowed as a critical dimension from disciplines spanning from crisis management (Boin and Hart, 2003) to emergency management (Kiltz, 2009; Collins and Peerbolte, 2012; Peerbolte and Collins, 2013) to leadership (Boin and Hart 2003; Stern, 2009). It implies and fosters an organizational 'learning behaviour' (e.g., McGrath, 2001; Carmeli, 2007).*

Source: Adaptation from Barbera et al. (2017, 2019), Barbera and Steccolini (2021), Steccolini et al. (2017)

Coping Capacities

Coping capacities allow organizations to manage their vulnerabilities (Barbera et al., 2018b, 2019). These capacities "lie dormant in times of order and become visible in times of disruption through coping actions (Linnenluecke, 2017)" (Barbera et al., 2019: 675). The following major drivers and approaches to respond to crises have been identified in past research: rapidity of action, adaptability, and networking (see table 3 for more details on the four specific forms of coping considered in the municipalities' surveys conducted in 2017 and 2021, namely adaptation of people, rapidity of action, internal collaboration, and external collaboration).

However, not all coping capacities are already pre-existing. Indeed and to provide an example, based on past research on governmental financial resilience, we have identified three main typologies of coping capacities (e.g., Béné et al., 2012; Davoudi et al., 2013; Darnhofer, 2014):

- *Buffering capacities*, i.e. the ability to absorb the impact of crises and shocks maintaining the status quo in terms of organizational structures and functions. These capacities seem to be adequate in the short term, when the organization hit by shocks need to be robust and resist;
- *Adaptive capacities*, i.e. the ability to cope with shocks through incremental changes to extant structures and function (see, for example, Mallak, 1998; McManus et al., 2007; Whitman et al., 2013). Adaptive capacities seem to rely on the idea of flexibility where organisational resilience is the result of an ability to change after external and/or internal shocks (see Wildavsky and Caiden, 1988; de Oliveira Texeira and Werther Jr., 2013; Demmer et al., 2011; Skertich et al., 2013; Välikangas and Romme, 2012; Pal et al., 2014; Ates and Bititci, 2011). Behind this interpretation there is the belief that flexibility is an essential and distinctive feature of resilient organisations (e.g., Sheffi and Rice, 2005).
- *Transformative capacities*, i.e. the ability to cope with shocks by means of radical and innovative changes of extant structure and functions which also imply a change in organizational values and goals. Here, flexibility is particularly emphasized.

Different organizations may display different types and mix of these capacities, and this affects the resources and abilities that are used to cope with shocks. Table 3 gives a view on the specific accounting and financial processes and tools characterizing these abilities.

Table 3: Coping capacities: Operationalization and examples

Dimension of the toolkit	Categories of coping capacities/ primary	Definition		Financial/accounting operationalization of coping capacities
Coping capacity	*Rapidity of action and Bricolage* (Bruneau et al., 2003; Kendra and Wachtendorf, 2003; Sutcliffe and Vogus, 2003; Bhamra et al., 2011; Whitman et al., 2013; Wicker et al., 2013*)*	The capacity to take prompt decisions and to quickly reconfigure internal resources to cope with unforeseen events, also by combining existing, but untapped, resources		*Buffering* • Cancellation of doubtful liabilities • Centralization of purchasing • Cost cuts • Deferring investments • Financial reserves • Increase in debt (loans) • Increasing fees and charges • Moratorium on debt repayment • Over-programming (for flexibility) • Prioritization of the expenditure • Selling assets • Virements
	Internal collaboration (Andrews 2010; 2011; Paliokaitė and Pačėsa 2015; McManus 2008; Lee et al., 2013)	The extent to which employees collaborate to cope with shocks, also across different departments which also tend to imply high levels of trust between organizational leaders and employees[2]		
	*Employees adaptability , skills and knowledge (*Mallak 1998; McManus, 2008; Lengnick-Hall et al., 2011)	The presence, within the organization, of resilient individuals with adaptive behaviors, bricolage skills, team working and sharing of the decision making power. This implies the capacity of employees to adapt to unforeseen events by assimilating and using new knowledge to manage their work and to keep updated to changes		*Adapting* • Brake on debt • Collegiate planning • Invest to save • Performance management • Re-balancing the budget • Risk management
	External collaboration (see Andrews 2011)	The capacity to collaborate with external partners regardless of organizational boundaries, to have strong relationships with external actors that allow to better cope with unexpected events (e.g., as they allow to mutually support each other by integrating internal resources and capacities to provide services)[3]		*Transforming* • Autonomy • Financial self-sufficiency (alternative income sources)

Source: Adapted from Barbera et al., (2018a) and Barbera and Steccolini (2021)

[2] Recently, Kober and Thambar (2021) showed that internal planning meetings to cope with the consequences of the Covid-19 crisis affecting charities' funding was fundamental, thereby confirming Hall's (2010) argumentation that accounting talk helps organizations develop financial resilience

[3] External networking and collaboration, as community and organizational social capital, has been shown to have positive implications on organizational performance (Andrews, 2011). Evidences show that working in a networked environment allows to better mobilize and share resources, to learn and to better respond to emergences (e.g., Andrews et al., 2016).

2.3. Consequences of resilience capacities and shocks

Barbera et al. (2015, 2016, 2017) and Steccolini et al. (2017), through a plurality of case studies, have shown that there are different ways in which municipalities can be financially resilient, giving rise to a plurality of more or less financially resilient behaviours, including self-regulatory/pro-active adaptation, reactive adaptation, constrained adaptation, contentedness, and powerlessness. These patterns (or resilience configurations) result from the dynamic combination of the different dimensions of the financial resilience framework (for details, see Barbera et al., 2017; Steccolini et al., 2017). In this chapter we will specifically focus on two types of consequences of resilience capacities, i.e., the types of responses to crises, and financial and non-financial performance.

Responses to crises. In responding to a crisis, an organization may absorb the relevant shocks and return to its original state, *'bouncing back'* to the performance and ways of doing things which characterized the time before the crisis (Meyer, 1982; Boin et al., 2010; Linnenluecke, 2017; Barbera et al., 2019). In contrast, an organization will *"bounce forward"* by learning, adapting to the unexpected adversities and thus getting to a new state, improved performance and/or new ways of doing things (Meyer, 1982; Somers, 2009). Resilience capacities have been found to shape responses to crises. More specifically, in their study of Italian, German and UK municipalities, Barbera et al. (2019) found that, while all types of shocks were associated both with bouncing-back and bouncing-forward strategies, a higher level of financial vulnerability encouraged bouncing-back strategies while discouraging bouncing-forward strategies. Moreover, while anticipatory capacities, and in particular information exchange, were found to facilitate the adoption of bouncing-forward strategies, they have no association with bouncing-back strategies. This suggested the importance of resilience capacities in taking a pro-active approach in dealing with crises (Barbera et al., 2020).

Financial and non-financial performance. Looking at the relationship of vulnerabilities and capacities with the performance of municipalities, and more specifically differentiating between financial and non-financial (or service) performance, Barbera et al. (2019) found a strong association between financial vulnerability and financial performance. However, only some anticipatory and coping capacities affected this performance dimension, namely monitoring, internal information sharing and rapidity of action. Focusing on service performance, the results showed a comparatively lower impact of financial vulnerability while the whole range of anticipatory and coping capacities showed a strong association with this dimension (Barbera et al., 2018b).

3. The Context and method: exploring local government financial resilience in France, Germany, Italy, and the UK

The chapter wishes to offer a state of play of municipal financial resilience dimensions through the presentation of the results of two surveys conducted, among municipalities, in four European countries - France, Germany, Italy, and the UK, in 2017 and 2021. It offers some descriptive statistics in order to compare the shocks that Municipalities had to face in the different countries, their level of vulnerabilities and the development of their capacities. This section presents the specific country contexts of France, Germany, Italy and the UK, and the surveys conducted among top managers of municipalities.

All four countries are large economies, and at the time of the studies were members of the European Union, with the UK having embarked on the path towards Brexit starting with the June 2016 referendum, and the exit from EU having taken place at the end of January 2021.

While the politico-administrative system differs across the country contexts, with the UK and France being centralized states, Italy a centralized state with strong regionalization, and Germany a federal state, their municipalities have comparable functions and fiscal arrangements.

The countries also represent different administrative traditions (see Pollitt and Bouckaert, 2017). This allows to account for a possible effect of different administrative contexts, and related properties of rules and regulations for the local level, on municipalities' financial resilience. France and Italy represent the Continental European Napoleonic administrative tradition, with the former being an example of a Central European, and the latter of the Southern European state. Germany has a Continental European Federal State tradition, and the UK is a typical example of the Anglo-Saxon administrative tradition (Meyer and Hammerschmid, 2010; Pollitt and Bouckaert, 2017).

The size of municipalities differs across the four countries. While in France, Germany and Italy, the average size of municipalities is smaller, and therefore the number of municipalities is relatively high (France: 34,165, Germany: 11,116, Italy: 7,904 municipalities), municipalities in the UK are fewer (408) but therefore substantially larger (average size: 150,000) than their continental counterparts (see also Table 4).

Table 4: Characteristics of the selected studied contexts (OECD Database, 2019 and Eurostat, 2020)

	France	Germany	Italy	UK
Population in mio. 2020	67,320,216	83,166,711	59,641,488	67,025,542
GDP in bio. US Dollars 2019	3,419.58	4,782.66	2,756.95	3,334.00
GDP per capita in 2019	50,693.52	50,693.52	45,691.04	49,912.48
Administrative tradition	Continental European Napoleonic	Continental European federal model	Continental European Napoleonic/ Southern Model	Anglo-Saxon Model
Level of decentralization	Unitary	Federal	Unitary ("Quasi")	Unitary
General debt level in % of GDP 2019	123.1	67.5	154.2	118.5
Financial vulnerability 2006 / 2012 (Lodge/Hood,2012)	Medium/ High	Medium / Medium	High / Medium	Low / High
Local debt level in % of GDP (2019)	10.3	5.3	10.10	5.7
Local debt level in % of Total Public Debt 2019)	8.3	7.8	6.5	4.9
No. of municipalities	34,965	11,116	7,904	408
under 5,000	32,775	8,236	5,681	
above 15,000	634	980	750	419
above 50,001	1129	182	147	401

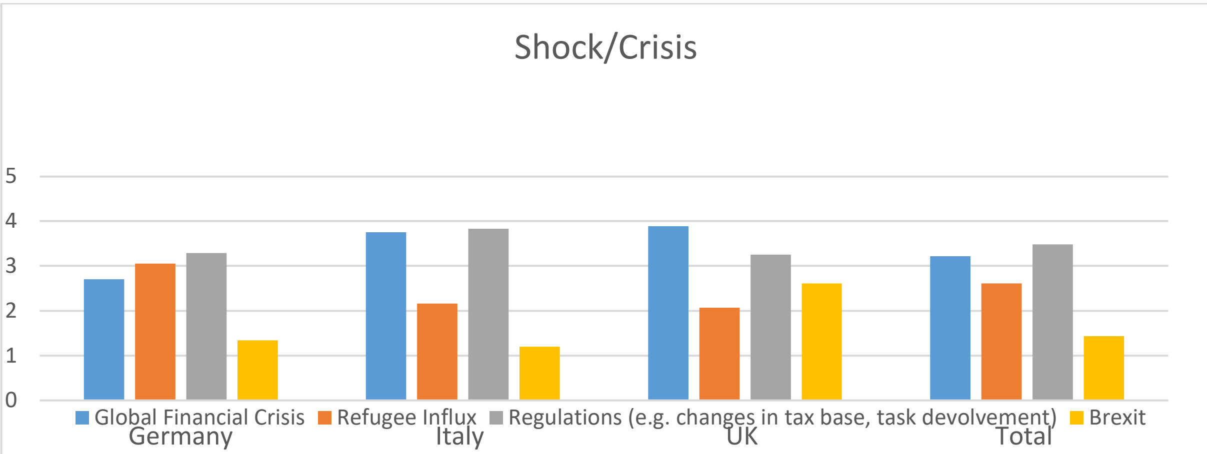
In order to provide the insights on the financial resilience dimensions of local governments in Europe presented in section 4, we use the results of two surveys conducted in 2017 and 2021. The operationalization of resilience dimensions presented in Section 2 provided the basis for a survey instrument that has been addressed to chief executive officers, chief financial officers and service managers of municipalities over 15,000 inhabitants.

In 2017, it was administered to Italian, German, and UK municipalities, gathering ca. 500 responses (Barbera et al., 2018b). In 2021, the nature and timing of COVID-19 pandemic provided an opportunity to use this crisis as a magnifying glass (Saliterer et al., 2021) for capturing and further increasing the understanding of financial resilience. Responses from more than 600 municipalities in France, Germany, Italy, and the UK were collected.

4. European Municipalities: state of the financial resilience capacities

4.1. From the global financial crises to COVID-19: a decade of shocks for European Countries

Europe in the second decade of the 21st century provides a relevant context for observing resilience capacities that are in place for Municipalities in Europe. A few years after the introduction of the Euro in some European countries, Europe was faced first with the global financial crisis of 2008, and then with the subsequent austerity measures adopted by many countries to cope with rising public debt and deficits (Bracci et al., 2015). These were followed by the refugee and migration crises and the Brexit referendum, which ignited the process culminating in the exit of Great Britain from the European Union in January 2021. The decade closed with the outbreak of the COVID-19 pandemic in 2020. Municipalities analysed in our 2017 and 2021 surveys perceived the relative importance of the shocks quite differently in the various countries.

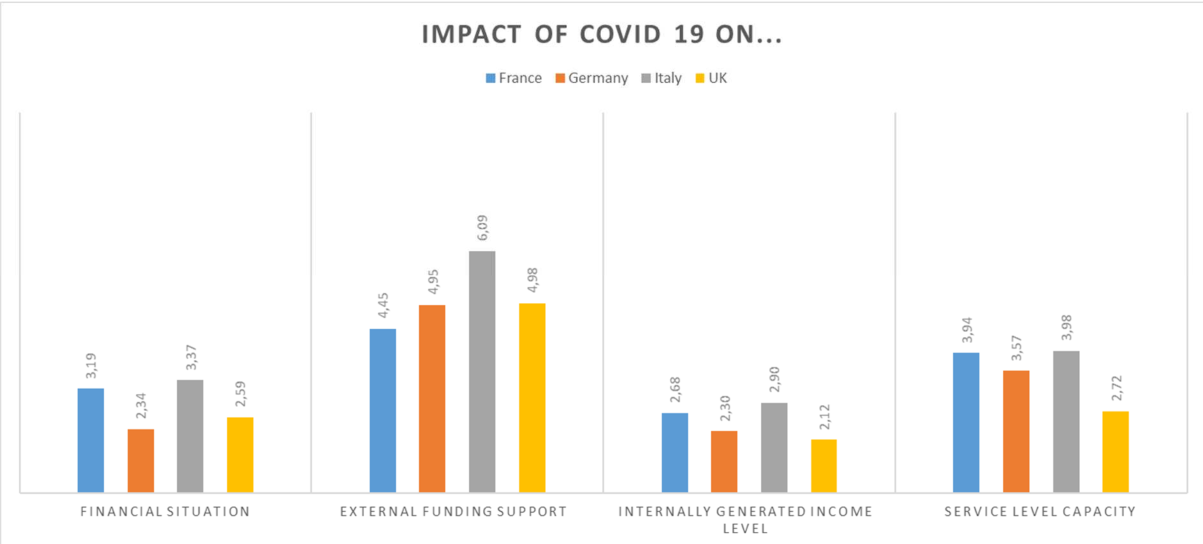


Note: 1=not at all, 5=to a large extent

Figure 2: Results from the 2017 Survey Shocks/Crises affecting municipalities' finances (country mean). Adapted from Barbera et al. (2018b).

As highlighted in figure 2, in 2017 *(changing) regulations* were the central preoccupation in most countries and especially in Italy (Barbera et al., 2019). The *global financial crisis* followed as second most important source of shocks (in total), though with different concrete impacts in the observed countries: grant reduction in Italy, France (du Boys, 2017) and the UK, tightening of fiscal targets in Italy (Barbera, 2017), reduced commercial tax in Germany (Papenfuß et al., 2017) and business rates in the UK (Jones, 2017), increased demand for services in Italy and the UK. The *refugee crisis*, affecting Europe in 2015 and 2016, mainly impacted German municipalities (see also Barbera et al., 2018b), with municipalities playing a crucial role in organizing accommodation and care facilities (see Papenfuß et al., 2017). *Brexit* was recognized in the UK as a moderate shock, while it did not seem to affect municipalities elsewhere in Europe (see Barbera et al., 2018b).

The 2021 survey captured the impact of the COVID-19 crisis on finances and services across French, German, Italian and UK municipalities (figure 3). The European municipalities responding to the survey identified a severe negative impact of the pandemic on their financial situation, associated with a severe impact on internally generated income (i.e., local taxes, property taxes, sales, fees and charges). At the same time, external transfers were relatively preserved. The latter result may also be a consequence of support packages coming from the central government and the EU. With regard to the impact of COVID-19 on service level capacity, a quite varied picture occurs, with the UK municipalities experiencing the most severe perceived impact.



Note: 1-3 = negative impact, 4-6 = neutral, 7-9 = positive impact

Figure 3: COVID-19 affecting municipalities' finances and service level capacity (country mean).

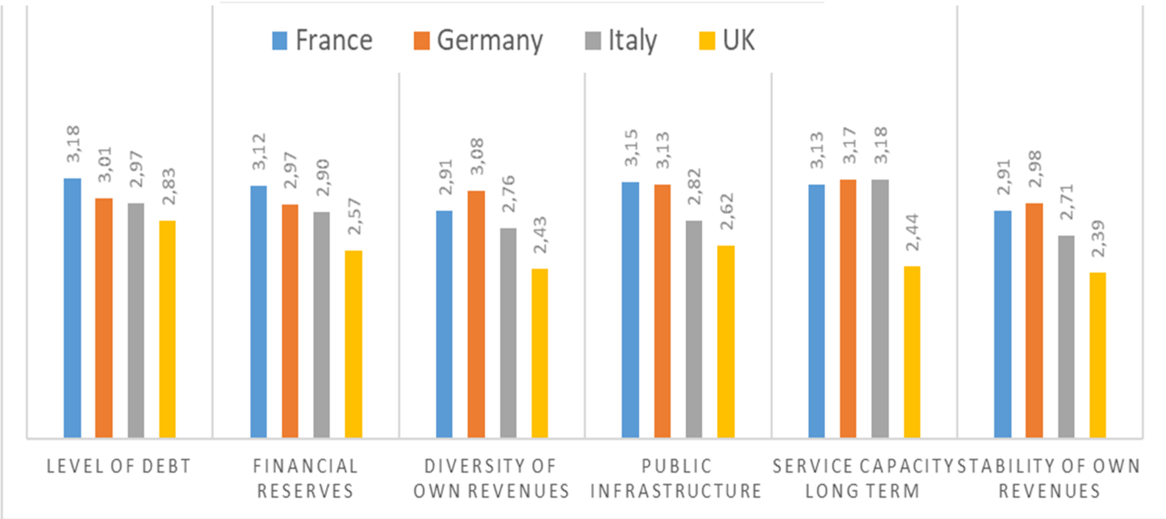
4.2. Financial vulnerabilities of European Municipalities

Perception of vulnerabilities evolve across crises, time and countries. In the 2017 survey (Barbera et al., 2018b), municipalities in Germany perceived themselves, on average, as more financially vulnerable than in Italy or the UK. In particular, they felt as being less financially autonomous than their counterparts and more vulnerable regarding the volatility of their own revenue sources and the (in)sufficiency of financial reserves. Italian municipalities perceived themselves as slightly less vulnerable in terms of indebtedness than their counterparts. In all others aspects, UK municipalities appeared comparatively to feel less vulnerable, which is probably due to their power to retain a proportion of the business rates, increase council tax up to certain caps, and have larger flexibility in their commercial activities (see Barbera et al., 2018b).

In 2021, the situation appears to be different (see figure 4)[4] as UK municipalities perceived their financial vulnerabilities to be higher than their European counterparts in France, Italy and Germany

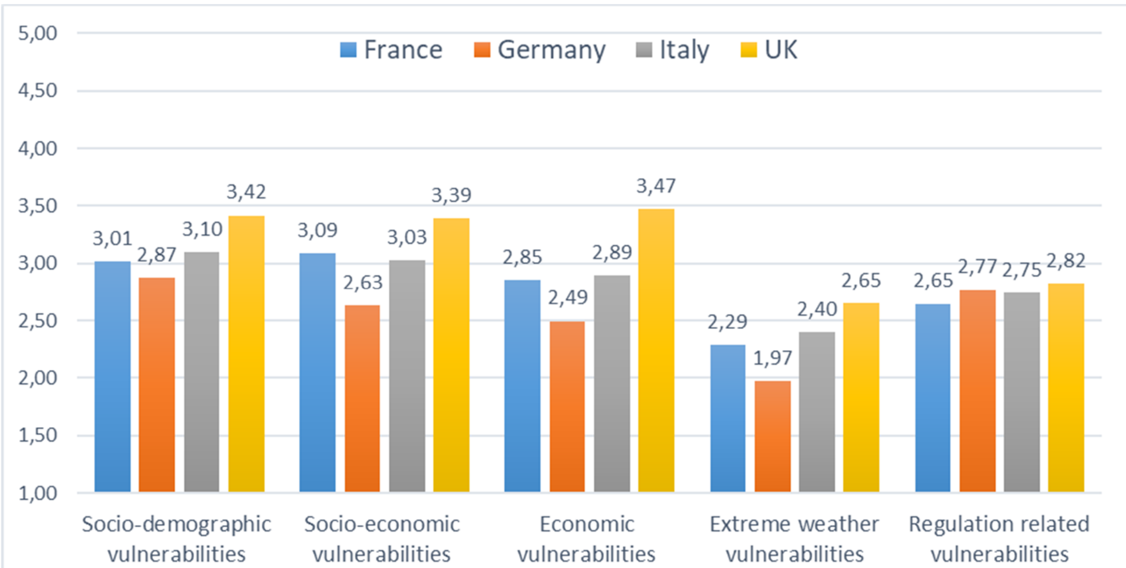
[4] While country comparisons offer an interesting starting point for discussions, the focus of the governmental resilience framework is on the organizational level. Therefore, we changed the assessment of financial vulnerability in the 2021 survey, and asked respondents to rate their vulnerability sources compared to peer

for all the aspects investigated. This drastic results could be linked to the cumulated impact of external events such as Brexit and a decade of austerity. The greater perceived vulnerability of UK municipalities in 2021 also appeared when it comes to context-related vulnerabilities of municipalities (figure 5).



Note: 1=much worse, 3 = similar, 5=much better, higher agreement to the statements equals lower perceived vulnerability.

Figure 4: Municipalities' financial vulnerabilities (country mean) in 2021.



Note: (1) no, (2) minor, (3) average, (4) considerable and (5) major

Figure 5: Municipalities' external vulnerabilities (country mean) in 2021.

governments (i.e. similar in size and task profile). This approach follows the one taken to assess the performance of organizations, as it has proven to be a valid form of self-assessment. A direct comparison of the country results between 2017 and 2021 is therefore not feasible.

4.3. Anticipatory Capacities in European Municipalities in the face of global crises and pandemics

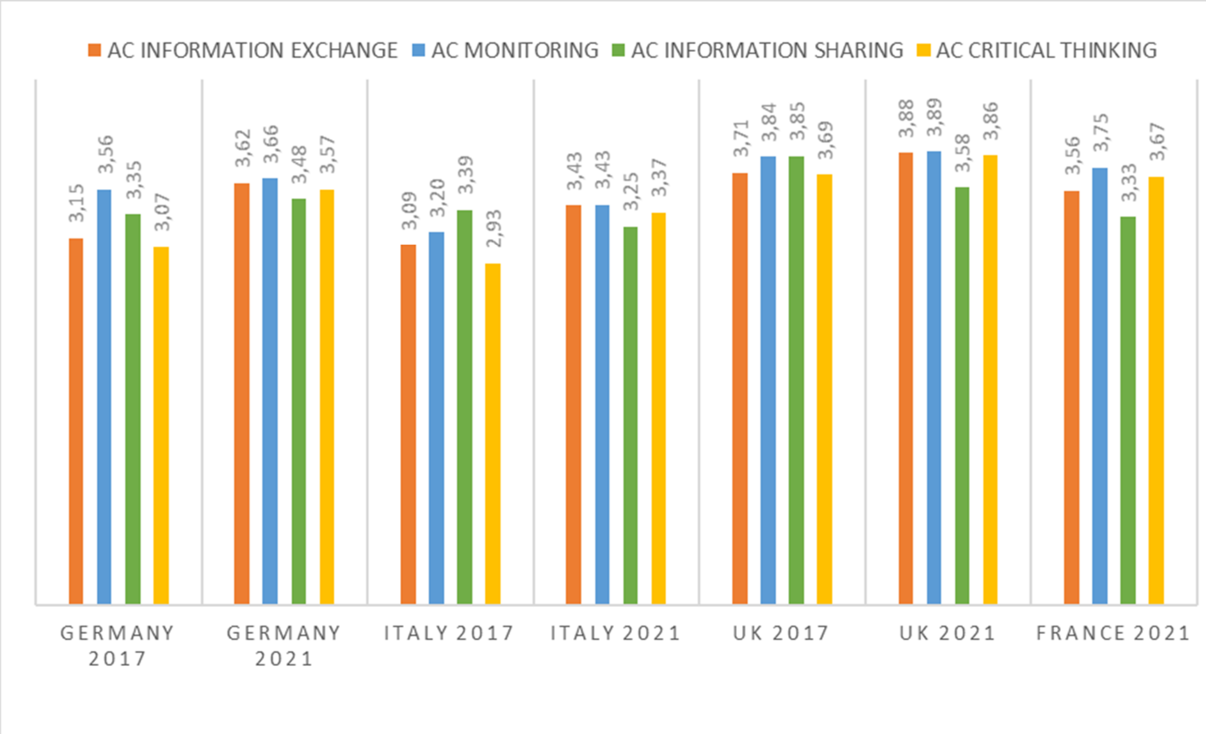
The four types of anticipatory capacities (Table 2) were assessed in the survey of municipalities across Germany, Italy, and the UK in 2017 (and subsequently in 2021, adding France). In 2017, monitoring seemed to be more widely applied and institutionalized across the three countries than internal information sharing, external information exchange, and critical thinking (Barbera et al., 2018b). In 2021, the differences across countries appear to have narrowed down. However, UK municipalities still seem to foster more critical thinking, followed by German and French municipalities, with their Italian counterparts seemingly downplaying this aspect of anticipatory capacities.

Overall, both in 2017 and in 2021, UK municipalities seemed to have more developed anticipatory capacities than their continental counterparts (see Figure 6). In the aftermath of the COVID-19 crisis, municipalities across all four countries seemed to recognize the relevance of exchanging information with external service providers. However, especially UK municipalities seemed more likely to exchange information with their peers constantly. The latter is also the case with regular vulnerability assessment, where UK municipalities score notably higher. As suggested by earlier findings from case studies (Barbera et al., 2016), this is to some extent due to regulations by the UK central government, that - compared with the other countries - put a stronger emphasis on medium-term financial planning, risk assessment, and other environmental monitoring tools.

In contrast, in Germany, municipalities' anticipatory capacities comprised long-term investment plans and risk reports, but tools such as scenario analyses or contingency plans in some cases were deemed unsuitable for shocks such as the global financial crisis. The latter was considered too uncommon to be anticipated (Saliterer et al., 2017). However, other cases in Germany had implemented contingency plans seemingly due to more developed anticipatory capacities following experiences with prior (mainly natural disaster-related) shocks and crises (see Saliterer et al., 2017). Hence, in both surveys, 2017 and 2021, German municipalities' assessment of anticipatory capacities ranks in the middle, as they score lower on vulnerability assessment but higher when it comes to monitoring.

In both 2017 and 2021, the level of development of anticipatory capacities seemed relatively lower in Italy. In particular, they scored lower when it comes to monitoring their environment. Case studies revealed that Italian municipalities' planning and monitoring processes were often weak and awareness of political and administrative actors was low. In those cases where anticipatory capacities seemed to be more developed, the capacities surfaced mainly as good strategic and financial planning, internal monitoring processes, risk management, and simulation (Barbera 2017, Barbera et al., 2017). According to survey results, also critical thinking was lower for Italian municipalities.

In 2021, the level of development of anticipatory capacities in French municipalities tends to be higher than in their counterparts in Italy and Germany. In 2015, case studies of French municipalities underlined a more nuanced situation. On the one hand, a predominant lack of management control or monitoring was observed. On the other hand, after the impact of the financial crisis, municipalities had invested in developing management control processes, and monitoring and planning tools (du Boys 2017).



Note: 1=strongly disagree, 5=strongly agree

Figure 6: Municipalities' Anticipatory Capacities (country mean) (2017 and 2021).

4.4. Coping capacities in European Municipalities in the face of global crises and pandemics

Steccolini et al. (2017), through case studies, offer several illustrations of the mix of coping capacities deployed by European municipalities in the face of austerity. Facing the financial crisis, municipalities in all countries seemed to rely significantly on *buffering capacities,* and on *adapting* ones to a much lesser extent. For example, in Italy, they were partly developed only some time after the initial impact of the shock and crisis had materialized. They were mainly visible through the actions of building internal competencies, increasing networking with external stakeholders, adjusting organizational activities, rationalizations, reorganization and restructuring of services, and through re-targeting service users while maintaining the general modus operandi of the municipalities (Barbera 2017). In France, *adapting* capacities were mainly visible through a pro-active stance in attracting businesses and a re-structuring of their internal organization (du Boys 2017). Compared to the other countries, municipalities in England seemed to build on more developed *adapting* capacities such as systematic task reviews or reviews of service provision to reduce or re-design services, performance reporting and changes to (outcome-based) budget planning and budget execution that allowed policy prioritization, strengthening risk management and benchmarking, and fostering multi-agency collaboration as well as partnerships. At last, we observed limited actions that would signal strong *transforming* capacities. The English cases included in the qualitative studies were the ones with more developed *transforming* capacities, as shown by measures to develop autonomy and self-regulation of the local context to achieve self-sufficiency of the local government, as well as by measures of re-positioning or re-thinking the modus operandi of the local government through increased co-production with other public partners (see Barbera et al., 2017).

The surveys in 2017 and 2021 (figure 7) show that similar to findings related to anticipatory capacities, municipalities in the UK have built stronger coping capacities than those in Germany, Italy or France. Again, German municipalities lay in the middle while their Italian counterparts appear to have relatively lower coping capacities.

Comparing the four specific coping capacities, it turned out that external collaboration received the lowest scores in both years, and in all countries. In Germany, internal collaboration was relatively more developed than the other coping capacities. Conversely, in the UK, rapidity of action and adaptation of people (in 2017) scored slightly higher than internal collaboration. In France and in Italy, it is the rapidity of action and internal collaboration that received the highest scores.

Between 2017 and 2021, Italian and German municipalities appeared to have developed their anticipating capacities (except for internal collaboration in Germany), whereas the development is more ambiguous in UK, where only rapidity of action improved.

Note: 1=strongly disagree, 5=strongly agree

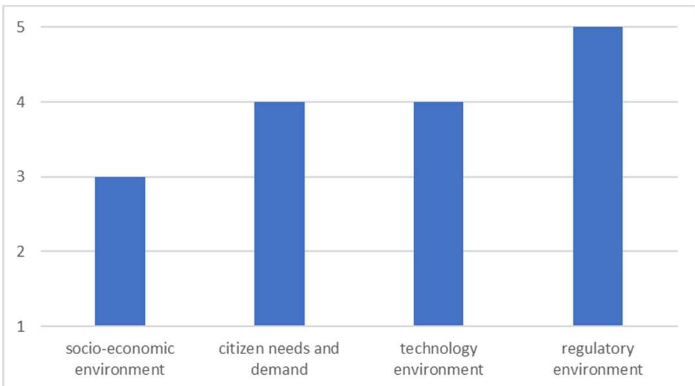
Figure 7: Municipalities' Coping Capacities (country mean 2017 and 2021). 2017 Figures from Barbera et al., (2018b).

In summary, the findings provided an indication that municipalities in the four European nations showed different levels of perceived vulnerability, and that the type of crisis to face would also shape the feeling of vulnerability. Indeed, UK municipalities felt less vulnerable in 2017, as opposed to their counterparts in France, Germany, and Italy. However, this situation changed in 2021, probably as a consequence of Brexit and covid-19 bringing changes to the international scene. Interestingly, UK municipalities appeared to rely on stronger anticipatory and coping capacities, especially those based on managerial tools, probably as a result of the UK having been at the forefront of NPM reforms. Differently, their EU, continental, counterparts, remain rooted in a neo-weberian system, where the building of risk management systems or other systems for planning and monitoring may have attracted less attention. At the same time, however, France, Germany and Italy appeared to have an institutional and fiscal context where municipalities are in better control of their own income and resources. Conversely, UK municipalities seem to be highly dependent on the central government funding decisions. Over time, this may have also contributed to explain an increased sense of vulnerability and lak of control in the British context as opposed to the EU one. These findings suggest the need to further investigate how differences in financial resilience dimensions explain different financial and non-financial outcomes, and how different resilience patterns emerge across different administrative traditions.

5. Implications for practice and policy: from the framework to new explorations and self-assessment

So far, this chapter has presented the governmental financial resilience model, discussed its operationalization, and illustrated it through data collected from municipalities across four European countries. Fom a practice and policy perspective, the framework can also be translated into a “toolkit” that assist governmental organizations in assessing their configuration of (financial) resilience dimensions. In practice, organizations can assess their anticipatory capacities, coping capacities, and perceived vulnerabilities to identify possible critical areas or strengths. Based on the results, municipalities can derive actions and strategies to sustain and strengthen extant capacities or build new ones (for a full version of a proposed toolkit, see Barbera et al., 2018). The toolkit contains key questions for each governmental financial resilience dimension and sub-dimension.

Figure 8 shows an example of how a potential respondent of one governmental organization might respond to a self-assessment question concerning the monitoring dimension, the latter being part of the anticipatory capacity of its organization. All the other dimensions and related categories can be assessed in the same way.

Is my organisation able to anticipate unexpected events?		**Anticipatory capacities: Monitoring external activities**
Does the local government have a clear understanding of the environment? Being aware of the external environment is essential in order to anticipate potential shocks and to identify and manage key local government vulnerabilities.		
In my organization we constantly monitor	(1) Not at all → (5) To a great extent	
changes in socio-economic environment	1 2 3 4 5	
changes in citizen needs and demands	1 2 3 4 5	
changes in technological environment	1 2 3 4 5	
changes in regulatory environment	1 2 3 4 5	

Source: Adapted from Barbera et al. (2018)

Figure 8: Example of a self-assessment questions concerning the monitoring capacity.

The self-assessment toolkit can assist local decision-makers in conducting organizational analyses. By integrating answers from respondents of the same or different departments, the results can be used as a starting point for internal discussion and as a way to share interpretations, perceptions and possible solutions, thus informing future decisions. From this perspective, the self-assessment toolkit can allow both financial managers and service managers to share ideas and reflections on how different capacities and sources of vulnerability affect their financial resilience. As such, the toolkit and the underlying governmental financial resilience model may be seen as a framework that allows not only to assess the capacities and vulnerabilities, but also to share a common language and way to frame crises and their impact, i.e. as a tool that provides the basis for discussion on what are the determinants of organizational financial resilience.

Additionally, municipalities can find it interesting to compare their own financial resilience positioning with the average positioning of local government in the same country, or with the average positioning of municipalities across different countries.

Moreover, the toolkit can be used by *policymakers, auditors and regulators* to conduct analyses from an external perspective, or at an aggregate level (i.e., central governments' financial resilience). In sum, both the concept of financial resilience and the self-assessment toolkit can inform organizational strategies and public policies.

6. Conclusions

In a context where crises and shocks are becoming increasingly frequent, governments increasingly need to be aware of their financial resilience and its underlying dimensions. They need to be aware of the ways in which they make sense of shocks and their sources of vulnerability; to build and maintain the capacities that allow them to absorb and react to shocks which affect their financial conditions, and ultimately their ability to ensure continuity in the provision of services.

This chapter has proposed a framework for understanding and studying, but also assessing, the financial resilience of municipalities, which results from the dynamic combination of types of crises or shocks, financial vulnerabilities, anticipatory capacities, and coping capacities. The chapter also highlights the main features of these dimensions in municipalities in the largest European countries (France, Germany, Italy and the UK). Finally, it also shows how this research can inform practice and policy through the development of a governmental financial resilience toolkit.

From a research perspective, the framework has proven robust and adaptable to different institutional contexts, including developing countries (e.g, de Aquino and Cardoso, 2017; Upadhaya et al., 2020) and crises of different nature (financial crisis, migration, pandemics). It would be interesting to see further applications and studies concerning different levels of government, exploring further the connections among financial, organizational, and individual resilience, as well as the relevance of the dimensions in facing current slow-burning crises related to poverty, rising inequalities, and climate change. In addition, the financial resilience model was born as a result of European studies conducted in contexts experiencing economic and financial shocks and/or shocks with severe economic and financial consequences, followed or accompanied by austerity, where resource constraints were a major issue. However, other crises may not show the same characteristics and the COVID-19 pandemic provides an interesting example from this perspective. The COVID-19 crisis has placed further emphasis on governmental (financial) resilience to the point that this term is now commonly used in many international and central governments' strategic agendas. As the pandemic has encouraged stimulus packages and expansion of spending in Europe, the coming years will witness the consequences of these policies, both on the capacities governments will be able to build and use, and on their finances. More generally, the current financial resilience framework identifies a plurality of relationships between types of crises and shocks, types and sources of vulnerabilities, types of anticipatory and coping capacities, and their possible consequences (in terms of responses, and financial and non-financial performance), which appear to be worthy of future investigation. It also points to the possibility of adopting configurational approaches to look into the consequences of different combinations of dimensions of resilience.

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