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## **Real-time crisis management: testing the role of accounting in local governments**

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# Real-time crisis management: testing the role of accounting in local governments

## Abstract

At a time of a global crisis with unprecedented depth and breath, this paper explores the role of accounting in real-time crisis management at local level by investigating how national stakeholders assessed the consequences of the Covid-19 pandemic in Italy, one of the most affected countries. The paper aims at augmenting knowledge on the intersection between weathering crisis and accounting. Calculative practices play an important role to help manage crises since they may foster or undermine relief and recovery efforts. Results show how decision makers used cash accounting disregarding more complete information with a wider and longer-term perspective, against some stakeholders' and scholars' advice.

**Keywords:** local government, Italy, crisis management, accrual-accounting, cash-accounting

## 1. Introduction

The recent Coronavirus pandemic has been identified as a cause of economic and social breakdowns (OECD, 2020). As experience shows, calculative practices such as accounting have played an important role to help manage crises (Lai et al., 2014; Sargiacomo and Walker, 2020). Since our lives will be marked by a variety of crises, it is paramount to explore the use of accounting practices to inform interventions.

This short paper answers the call for more accounting studies to unveil the deployment of calculative practices in the management of shocks and crises, since accounting may foster or undermine relief and recovery efforts (Kothari and Lester, 2012; Lai et al., 2014; Sargiacomo and Walker, 2020). **In general, calculative practices support accounting for precarious dynamics involving an abstraction and de-contextualization of complexity at times of uncertainty such as during a pandemic (Yu, 2020).**

The Covid-19 pandemic offers an interesting test ground to assess the appropriateness of such calculative practices in the face of transboundary crises, i.e. events that cross geographical, sectoral and policy boundaries, and hence multiply their impact, lead to the development of wicked problems and make responses much more complex (Boin and Lodge, 2016). The crisis induced by the Coronavirus pandemic is unprecedented in its depth and breadth as it spread relatively fast and affected overnight not only financial markets, but the real economy with the implementation of lockdown and social distancing measures (OECD, 2020).

Italian LGs represent an extreme case to assess the impact of the pandemic, since Italy was one of the first countries to be badly hit by Covid-19, so much that in late March 2020 it had the greatest number of deaths worldwide. Most economic and social activities were shut down on March 9<sup>th</sup> 2020 for at least 2 months. On the other hand, Italy has seen a comprehensive reform of its LG accounting system which has resulted in the coexistence of different accounting systems competing across jurisdictions (Mussari, 2014) and co-existing within the same entities (Heichlinger *et al.*, 2020; Manes Rossi *et al.*, 2016). This makes Italian LGs an interesting choice to explore the role played by accounting as a real-time management tool in the immediate aftermath of a global crisis.

## 2. Theory and methods

Several authors have investigated the role played by accounting during exceptional crises in assessing damages, in guiding the design and implementation of emergency responses, tracking and accounting for the fair and transparent management of relief funds, and in furthering financial impacts (Kothari and Lester, 2012; Lai *et al.*, 2014; Sargiacomo, 2015; Sargiacomo and Walker, 2020). Governments need to embrace a strategic approach to avoid a two-pronged risk: they need to spend sufficiently effectively in the short run, making good use of looser budgetary constraints and emergency funds to bring under control critical situations, while at the same time lay the foundations to recover from the mounting debt that may induce fragile post-crisis socio-economic conditions (Anessi Pessina *et al.*, 2020; Cepiku *et al.*, 2020). On the other hands, scholars have emphasized that, if accounting can inform intervention plans, crises can reshape the role of public sector accounting and can foster previously unthinkable reforms (Bhimani, 2008). Despite these studies, there is still much to learn about the use of accounting and calculative practices in a crisis. Ezzamel and Bourn (1990) find

that accounting changes its role during a crisis from being an “answer or learning machine” in the pre- and post-crisis phases, to a “dialogue and idea machine” contributing to uncertainty absorption and conflict resolution during real time-crisis management. Indeed, Lai *et al.* (2014) underlie the socializing effects of accounting during a crisis when calculative practices can foster dialogue, mutual understanding, trust, and solidarity. Recent publications also call for accrual accounting as it can better inform decision making about emergency measures because it offers a fuller account of financial positions, debts and assets (Cohen *et al.*, 2021; PwC, 2020).

Calculative practices can reveal how vulnerable revenues are and how “rigid” and “sticky” expenditures are. Transfers from higher tiers of governments may have a redistributive as well as a restoring function (Capaldo *et al.*, 2016) helping solve vertical and horizontal imbalances across territories by redistributing revenues from less to more affected areas or restoring missing or reduced local revenues. In the face of Covid-19 lockdowns and economic standstills, many central governments have supported LGs facing decreasing revenues because tax and tariff bases have shrunk (OECD, 2020). However, LGs have no control on such exogenous resources so much that central government support is often *ad hoc* and unplanned and can create large liabilities (OECD and World Bank, 2019). Further, during a crisis rigid and sticky expenditures, which are undeferrable or difficult to cut, such as personnel and debt servicing costs (Cepiku *et al.*, 2016), not only make it difficult to balance the books in the face of falling revenues, but they may also make it challenging to redirect expenditures to support local communities when unemployment and social inequality increase and the demand for social services rises.

To further understand the role of accounting in dealing with global crises, this study investigates how national stakeholders have assessed the consequences of the pandemic on local finances in Italy. It focuses on how the impact of the pandemic at LG level was assessed, what accounting information was used for such assessment, and what can be learnt about the role of accounting in weathering transboundary crises. Evidence has been collected through secondary empirical sources, conversations and workshops with top officials at four major stakeholders, involvement in data collection and analysis for the reports such stakeholders prepared to inform real-time responses.

### 3. Italian LGs and Covid-19

#### 3.1 Pre-pandemic status-quo

Italian municipalities represent the level of government closest to the citizens in a unitary country with a highly regionalized and fragmented structure. Municipalities rely heavily on central and regional government transfers, but their revenue structure is quite different and based on their capability to raise local taxes and fees. Non-fundamental, hence deferrable, services absorb on average one fifth of current revenues, while rigid expenditure, that is personnel and debt serving costs, amount on average to one third of current revenues (Raffer and Padovani, 2019).

Between 1995 and 2015 Italian LGs saw various reforms aiming at avoiding financial disequilibrium and providing more transparency and accountability (Bisogno *at el.*, 2019). Accrual financial accounting was introduced parallelly to the traditional budgetary accounting system, which remains the main financial management tool to administer and monitor the budget via a commitment mechanism that guarantees the appropriation of the resources necessary to cover the payments to honor legal commitments. Budgetary accounting continues to have a pivotal role because “budgeting is simultaneously a tool for bargaining and allocating power and resources, for planning and controlling, and for ensuring transparency and stakeholder involvement” (Anessi Pessina *et al.*, 2016, p.493). Budgetary accounting relies on two bases: cash for informative purposes and modified accrual for balancing the budget and guaranteeing financial equilibrium. Since fiscal rules and consolidation limits are computed according to budgetary accounting, accrual accounting has never been taken into much consideration by local decision makers and auditors (Corte dei Conti, 2020; Liguori *et al.*, 2012). Moreover, recent provisions have made accrual information incomplete by exempting municipalities with less than 5,000 residents. Hence, when Covid-19 struck, Italian LGs relied on two accounting systems with three different bases and traditions (Table 1), which could be used to assess the impact of the pandemic and of possible countermeasures, their overall size, and their distribution across municipalities.

[Table 1. Accounting information available for LGs and its purpose - ABOUT HERE]

### 3.2 The impact of Covid-19

Four studies were produced in the aftermath of the pandemic using different accounting information and methodologies to assess the impact of Covid-19 on local finances (Table 2).

[Table 2. Accounting information used for assessing impact and decision making - ABOUT HERE]

It is interesting to notice that no study took into consideration information based on accrual accounting, probably because of its complexity, relative novelty and marginality in Italian LG finances (Bruno and Lapsley, 2018), even though it has been promoted as a panacea for financial crises and a tool for high quality statistics (Adhikari and Gårseth-Nesbakk, 2016). The actual decision maker was a Task force within the Ministry of Economy and Finance (MEF) composed of representatives from MEF, the Ministry of the Interior and the associations of local governments (ANCI and UPI). The Task force needed to legitimize its policy choices and used simple, indisputable, and readily available cash information such as actual collections and payments. The other studies used a mixed approach since they needed to communicate to officials and politicians who are used to work with modified-accrual budgetary accounting information and must balance their budgets in modified-accrual terms. Indeed, accounting can be used to foster dialogue, mutual understanding, trust and solidarity by driving stakeholders to engage with calculative practices which can in turn enable or constrain the accountability of a recovery process (Lai *et al.*, 2014).

### 3.3 Financial measures to weather the crisis at local level

In March, May and August 2020, the Italian central government issued several measures which offered some respite, but devolved no extraordinary powers to municipalities. LGs were still required to balance their budget, whose deadline was simply extended from April to October.

The accounting information collected during the first phase of the pandemic were used to decide on supporting measures. In particular, the study by ANCI was the first to be carried out and was used to begin the negotiation of the overall financial resources the central government invested in helping LGs. On the expenditure front, some measures were provided to temporarily reduce rigid expenditures with mortgage renegotiation and the postponement of capital installments by one year. Revenue reductions were contrasted by cash advances on transfers from the central government, bank overdraft facilities, and relief grants. Overdraft facilities were allocated to municipalities according to their level of overdue debts at the end of 2019, in a redistributive more than restoring effort with little strategic foresight (Anessi Pessina *et al.*, 2020), while relief grants were based on the expected revenue and expenditure reductions estimated by the Task force. However, the revenue loss estimation by the Task force was only on average 11.5%, much lower than those calculated by ANCI and CNEL which ranged from 9 to 22%, with touristic and larger municipalities being hit the hardest as they tend to rely proportionally more on local taxes and fees. Revenue estimates by the Task force were based on a cash basis, that is on actual collections in the period between January and May 2020. The use of cash data instead of modified-accrual or accrual information leads to potential distortions due to different accounting logics: cashflow information may be influenced by contingent elements with revenue collections affected momentarily by extraordinary events, which might be overcome already in the following months. On the contrary, accrued or modified-accrued revenues consider also sums which, though due now, will be paid in the future. Hence, the method used by the Task force could risk penalizing those entities whose taxpayers paid their taxes and service fees regularly even during the Covid-19 crisis, so that the drop in revenue collection was less pronounced with respect to municipalities with less “virtuous” citizens or collection mechanisms. LGs which have traditionally experienced difficulties in tax collection, are thus likely to be less affected by the crisis because their higher arrears and estimated cash losses will bring them proportionally more relief funds.

## 4. Conclusions

While the situation is evolving and data are still provisional, Italy offers an interesting case for assessing the role that accounting plays in real time-crisis management. For their assessment and policy considerations, stakeholders used the information that was considered the most objective and therefore legitimate, which their

audience could understand better and which better served their immediate purposes. Notably, the Task force selected cash accounting as the most objective and therefore legitimate set of information to estimate financial impacts even though it had other information at hand. This reveals that at least in the aftermath of the crisis, accounting practices have not yet fully benefited from accrual-based tools which, paradoxically, were introduced also to support decision making at difficult times and avoid some of the distorting effects caused by other accounting bases.

Referring mainly to cash accounting disregarding accrual and modified-accrual information leads to a short-term perspective which, on the one hand, underestimates some impacts and, on the other, does not consider long-term ones. This is precisely what the literature advised against (Anessi-Pessina *et al.*, 2020; Cepiku *et al.*, 2020). Future research should focus on accounting and calculative practices in real-time crisis management and verify whether using accrual information would avoid such a potentially harmful double myopia. Research could assess the net worth effects of crises and countermeasures, that is consider also the impact of future cash unbalances on citizens and stakeholders at large in terms of higher taxes, fees, and so on.

In Italy, emergency responses based on cash accounting are furthering financial impacts and changing financial geographies, while the local financial imbalances caused by the pandemic have simply been deferred since most resources were provided as debt, relief grants are deemed far below expected revenue losses, and capital debt installments have just been postponed by one year (CNEL, 2021). One day these chickens will come home to roost.

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**Table 1. Accounting information available for LGs and its purpose**

<b>Type of accounting system</b>	Budgetary accounting		Accrual financial accounting
<b>Basis of accounting</b>	Cash	Modified-accrual	Accrual
<b>Main aim</b>	Informative purposes	Administering and monitoring the budget, compliance with fiscal rules and consolidation	Reporting and transparency
<b>Coverage</b>	All LGs	All LGs	All except small municipalities

**Table 2. Accounting information used for assessing impact and decision making**

<b>Stakeholders</b>	<b>Time of publication</b>	<b>Purpose</b>	<b>Accounting information base</b>	<b>Methodology</b>
National Association of Italian Municipalities (ANCI, 2020)	April	Negotiation of resources with central government	Modified-accrual budgetary accounting	Revenues forecasts based on a survey of 56 provincial capital cities
National Council for Economics and Labour (CNEL, 2020)	July	Contribution to debate for relief grants distribution	Revenues: cash accounting	Revenues and current balance ratio forecasts based on rebate coefficients for 55 local revenue items using cash accounting average revenues for 2016-2018 and modified accrual current expenditures for 2018
			Expenditures: modified-accrual budgetary accounting	
Italian Confederation of Workers' Unions (CISL, 2020)	July	Contribution to debate for resources for social services	Modified-accrual budgetary accounting	Expenditures forecasts for social services based on a survey of 60 municipalities with over 15,000 residents
Task force (Ministry of the Interior, Ministry of Economy and Finance, associations of local governments ANCI and UPI) (MEF Task force, 2020)	July	Decision regarding distribution of relief grants	Revenues: cash accounting	Revenues forecasts based on cash flow difference between first 5 months of 2019 and 2020
			Expenditures: cash and modified-accrual budgetary accounting	Expenditures forecasts only for personnel-related costs and utilities based on historical commitments and cash flows