Abstract

For more than thirty years public management and accounting theories and practice have been strongly influenced by the search for efficiency, heralded by the New Public Management and similar public sector modernization movements. Public administrations have focused their attention on economy, efficiency and effectiveness, looking for cost containment, matching resources and goals, output maximization or input minimization. Even the wave of development of performance measurement and management tools have mainly emphasized the importance of short-term efficiency, often without worrying too much about their ability to ensure public administrations’ responsiveness in the face of unexpected events and crises.

1 The authors wish to acknowledge funding by CIMA international.
The present context of austerity and crises calls for unusual solutions and new conceptual lenses to cope with the related challenges. One of these possible alternative views is resilience. However, no conceptualization of resilience in the financial and performance management of public entities has so far been provided, in spite of calls for increased attention towards organizational flexibility and adaptability in response to increased contextual volatility.

The paper thus attempts a first conceptual framing of the landscape for adopting a “resilience” view of local government financial management literature and accounts for the preliminary results emerging from an ongoing project aimed at studying financial resilience in Italian and UK municipalities.

**Key words** Local Government, Municipalities, Financial Strategy, Resilience, Financial Resilience, Austerity.

**Introduction**

The current economic downturn and the crisis within public finances are posing unprecedented challenges to governments. The associated financial turmoil has put enormous pressures on cutting back expenditures and achieving balanced budgets in many developed and developing countries. At the same time, governments have been expected to meet an increasingly sophisticated and heterogeneous demand for services and to play a leading role in economic recovery and growth (Pandey 2010).

For more than thirty years financial management theories and public policies have been strongly influenced by the search for efficiency, economy and effectiveness heralded by the New Public Management (NPM) and similar public sector modernization movements.
Governments have often focused their attention on short-term efficiency, looking for cost containment, matching resources and goals, output maximization or input minimization. Even the wave of development of performance measurement and management tools have mainly emphasized the importance of effectiveness, efficiency, and economy without worrying too much about their ability to ensure government responsiveness in the face of unexpected events and crises.

However, local and global developments are now more fully intertwined and increased uncertainty, volatility and complexity require governments to put greater emphasis on organizational flexibility and adaptability (Comfort et al. 2010; Pandey 2010; Sacco et al. 2011; Adrich 2012; Shaw 2012; Wukich 2013; Boin and Van Eeten 2013). Governmental financial management is affected by these developments, and, in turn, affects how public entities can respond to them.

This paper aims at proposing a first conceptual framing of the landscape for adopting a “resilience” view of local government financial management literature and accounts for the preliminary results emerging from an ongoing project aimed at studying financial resilience in Italian and UK municipalities.

It proposes a conceptualization of a public entity’s financial resilience as the organizational capacity to rapidly adjust, adapt and change its financial management in response to shocks and disturbances. The analysis we suggest contributes to the wave of studies on financial management in local government that put long-term financial health to the centre of scholarly discussion.

More specifically, after looking at the governmental financial condition literature, the paper sums up relevant resilience literature, sketching a first conceptual reflection on how resilience
literature can enrich financial condition literature. It then describes the first phase of our research project, by presenting the methods and some preliminary results.

**Literature on governmental financial conditions**

Considerable efforts have been made to define the conceptual construct of governmental “financial condition”, resulting in a variety of definitions and measures. Several terms that measure the same concept have been used interchangeably such as financial health, fiscal stress, fiscal position and fiscal stability. These definitions generally aim at measuring the ability of a local government to satisfy short- and long-term financial obligations (cash and long-term solvency), balance the annual budget (budgetary solvency), and meet current and future service level as requested by its citizens (Groves et al., 1981; Wang, 2007; Carmeli, 2002, 2003; 2008). Ever since the 1980s, a number of studies have resulted in numerous efforts to assess the financial condition especially of local governments and to develop models and indicators to predict and detect fiscal distress (Hendricks, 2004; Kloha et al. 2005; Hendricks, 2011; Trussel and Patrick 2009; Maher and Deller 2010; Garcia-Sanchez et al. 2012), especially in the US (Ladd and Yinger, 1989; Groves et al., 2003; Kloha et al., 2005) and with a specific resurgence since the beginning of the global financial crisis (Skidmore and Scorsone, 2013; Cohen et. al. 2012, Honadle et. al. 2009, Trussel and Patrick 2009; Maher and Deller 2010; Garcia-Sanchez et al. 2012).

The fundamental divide in this literature is between authors focusing only on financial aspects (Chaney and Schermann, 2002; Sohl et al., 2009; Wang et al. 2007) an those using a combination of environmental, organizational, and financial factors to assess financial condition (Hendrick, 2004; Kavanagh, 2007; Cabaleiro et al., 2012). The latter stream of thought argues that local
governments are continuously interacting multi-directionally with their environment and thus a wider and more comprehensive view should be adopted. Accordingly, a local government’s fiscal condition is influenced by several interacting factors, internal to the organization, such as fiscal structure and current operating conditions, and external such as legislation, demographics, economics, fiscal autonomy, intergovernmental relationships, local politics, as well as disasters (Carmeli and Cohen, 2001; Hendrick, 2004; 2011).

Traditional financial management approaches have tended to emphasise a static view of efficiency, stability and control (Shaw 2012; Leach 2008), which have also been central in the modernization and NPM movements, and are often considered desirable for routine activities and stable environments (Hood 1991). Much less attention appears to have been devoted so far to appreciating the variability in financial condition and performance over time, the ability to cope with internal and external uncertainty and, more generally, to adopting a dynamic and long-term view of financial performance.

In trying to close these gaps, the present paper suggests that resilience literature can represent a useful reminder to financial management scholars that a focus on efficiency might be at odds with ensuring flexibility and adaptation, or the capacity to absorb shocks. In an increasingly complex and uncertain world, redundancies, building of adaptive capacity, controlling and in some cases limiting interdependencies seem to be key aspects to ensure not only financial efficiency but even organizational survival (Hood 1991; Dalziell and McManus 2004; Scotti Petrillo and Prosperi 2011; Breen and Anderies 2011; Pain and Levine 2012).
Resilience: From Physics to Governmental Financial Management? Definitions and dimensions of resilience

Resilience is generally seen as the capacity to deal with uncertainty related with shocks and disturbances (Shaw 2012). Over time, it has increasingly become an umbrella term, used in different realms, at different levels of analysis and highlighting different aspects, depending on the purpose of the study and the disciplines involved. Indeed, it is the subject of a wide range of disciplines and studies (Davoudi and Porter 2012; Breen and Anderies 2011; Boin and Van Eeten 2013): from physics and engineering (for example, Bodin and Wiman 2004; Norris et al. 2008) and psychology (for example, Werner 1995; Bonanno 2004; Luthar et al. 2000; Richardson 2002; Rutter 2006; Earvolino-Ramirez 2007) to ecology (for example, Holling 1973, 1996; Adger 2003; Anderies 2006) and climate change (Fünfgeld and McEvoy 2012), to planning theory (Shaw 2012; Wilkinson 2012; Porter and Davoudi 2012), disaster, emergency and crisis management (for example, Vale and Campanella 2005; Comfort 2002) as well as community resilience (Shaw 2012, Walker et al. 2006; Maguire and Cartwright 2008; Seville 2009).

In the various disciplines, the concept of resilience has been alternatively proposed as a propriety of individuals, structures and systems, as well as organizations, pointing out that it can be affected by behaviors, perspectives, interactions, power, leadership and resource availability (see McManus et al. 2007; Shaw 2012; Somers 2009; Breen and Anderies 2011). It can be considered as a capability for reaction to crises (passive resilience) or as the capacity to anticipate and cope with the unexpected (active resilience) (Somers 2009). More specifically, coping with external shocks may require a mere ability to “bounce back” to an initial “state of equilibrium” or a
capacity to “bounce forward” and evolve towards a new equilibrium (Holling 1973; Shaw 2012; Pickett et al. 2004; Scotti-Petrillo and Prosperi 2011; Boin and Van Eeten 2013).

Table 1 identifies the main definitions and components of resilience in organizational literature, referring to both the public and the private sector. This literature has generally pointed out that resilience consists of a combination of a series of dimensions, including robustness, risk awareness, flexibility/adaptive capacity and recovery ability.
### Table 1 – Definitions and dimensions of organizational resilience

<table>
<thead>
<tr>
<th>Findings of studies: Unifying components of resilience</th>
<th>Meaning</th>
<th>Author</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Robustness (as opposed to vulnerability)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the ability to withstand shocks without significant degradation or loss of performance</td>
<td>Bruneau and Tierney (2007); and others</td>
<td>the ability to withstand shocks without significant degradation or loss of performance</td>
<td></td>
</tr>
<tr>
<td>precursor resilience: “ability to accommodate change without catastrophic failure, or a capacity to absorb shocks gracefully”</td>
<td>Foster (1993)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>longevity—the ability to sustain operations, processes, functions, and productivity for several centuries (Kennedy, 1987; Tuchman, 1985)</td>
<td>Carmeli and Markman (2011)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambidexterity: proactive organisational conditioning (vs. reactive) --&gt; no crisis management, no turnaround programs</td>
<td>Mamouni Limnios, Mazzarol, Ghadouani and Schilizzi (2014)</td>
<td>magnitude of disturbance the system can tolerate and still persist, following the seminal work in complex socio-ecological systems by Gunderson and Holling (2001)</td>
<td></td>
</tr>
<tr>
<td>dual manifestation of persistence as either capacity for adaptive learning or resistance to change --&gt; ADAPTATION OR RESISTANCE TO INTERNAL OR EXTERNAL DISTURBANCES</td>
<td>Burnard and Bhamra (2011)</td>
<td>the ability to withstand systematic discontinuities as well as the capability to adapt to new risk environments</td>
<td></td>
</tr>
<tr>
<td><strong>Flexibility/Redundancy/Adaptive capacity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The extent to which the organization is capable of maintain adequate service performance and funding if significant loss of resources occurs</td>
<td>Wildavsky (1988)</td>
<td><strong>Organizational resilience</strong> is different from <strong>organization anticipation</strong> (in the latter risks are predictable whereas in the former they are unknown). Organizational resilience=retaining resources in a form sufficiently flexible (storable, convertible, malleable)to cope with whatever unanticipated harms might emerge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meyer A.D. (1982)</td>
<td>the impacts of an environmental jolt are influenced by an organization’s strategy and absorbed by slack (“superfluous”) resources, whereas the reactions to a jolt are shaped by organizational ideologies and constrained by organizational structures</td>
<td></td>
</tr>
</tbody>
</table>
| Capacity to renew over time | De Oliveira Teixeira and Werther Jr. (2013) | Continuous renewal of competitive advantages through innovation (the specific configuration of people, ideas, and execution needed to make innovation an ongoing source of competitive advantage is best summarized as resiliency)
An organization that adapts anticipatorily and repeatedly
From a financial perspective: when a company is able to maintain above-average returns even after absorbing the shocks of the competitive environment

Capability to self-renew over time through innovation (Reinmoeller & van Baardwijk 2003)

Välikangas, Romme (2012) | Strategic resilience (renewal-based) vs. Organisational resilience (recovery-based)

Pal, Tortensson and Mattila (2014) | Capacity to survive (not explicit)

Level of preparedness to change timely, rapidly and easily | Ates and Bititci (2011) | Rapidly redeploying and reconfiguring its technical and organisational resource base, thus enabling a quick response to unpredictable changes within its operating environment (Sine and David 2003). Consequently, it is agreed that resilience is a distinctive organisational capability (Stoltz 2004, Barton and Christianson 2006, Bergman et al. 2006) that is underpinned by an organisation’s ability to change timely, rapidly and easily (Vickers and Kouzmin 2001)

| Awareness | The ability to diagnose and prioritize problems and to initiate solutions | Linnenluecke and Griffiths (2013) | The government organizing capacity to deal with shocks

<p>| | | Awareness | Resiliency mindset: knowing the challenges a government may encounter in the future; &quot;Latent resilience potential&quot;, Somers (2009); Mallak (1998) |</p>
<table>
<thead>
<tr>
<th>Action (policies and measures) government take to reduce vulnerability to shocks</th>
<th>Bruneau and Tierney (2007)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk-reduction awareness</td>
<td>Fleming (2012)</td>
</tr>
<tr>
<td>The ability to successfully manage crises by anticipating and planning for the future, prioritize risks and dealing with threats after they have occurred</td>
<td></td>
</tr>
<tr>
<td>Organizational preparedness</td>
<td>Whitman, Kachali, Roger, Vargo and Seville (2013)</td>
</tr>
<tr>
<td>Organisation’s ability to plan for, respond to and recover from emergencies and crises</td>
<td></td>
</tr>
<tr>
<td>The organizational ability to undertake positive adjustments under challenging conditions. It include adjustments to both ongoing strains due to small interruptions as well as severe disruptions from larger events</td>
<td></td>
</tr>
<tr>
<td>The main aspects of organizational resilience in this context are the continuing capacity to recover from disturbances, as well as the capacity to rebound from adversity in a strenghened and more resourcevul way.</td>
<td></td>
</tr>
<tr>
<td>The capacity to restore functionality in a timely way</td>
<td>Kendra and Wachtendorf, (2003:42)</td>
</tr>
<tr>
<td>Recovery resilience = “ability to respond to singular or unique events”.</td>
<td></td>
</tr>
<tr>
<td>Vickers and Kouzmin (2001)</td>
<td>There is a trade-off between bouncing back unchanged (resilience as stability) and being flexible viz a viz resistance to change</td>
</tr>
<tr>
<td>Bruneau and Tierney (2007); Mcmanus et al (2007); other authors</td>
<td>Stability definition of resilience (no change-return to the status quo) vs adaptive definition (change based)</td>
</tr>
<tr>
<td>Mallak (1998)</td>
<td>Resilient members --&gt; Resilient organization: Responsiveness to change (For an organisation to be resilience, it needs people who can respond quickly and effectively to change while enduring minimal stress)</td>
</tr>
<tr>
<td>Lengnick-Hall, Beck, Lengnick-Hall (2011)</td>
<td>Ability to rebound from stressful, adverse situations and to pick up where they left off --&gt; BOUNCING BACK</td>
</tr>
<tr>
<td>Development of new capabilities and an expanded ability to keep pace with and even create new opportunities --&gt; TRANSFORMATIONAL VIEW, ABILITY TO ABSORB AND TO CAPITALIZE</td>
<td></td>
</tr>
<tr>
<td>Individual level knowledge, skills, and abilities and organizational routines and processes by which a firm conceptually orients itself, acts decisively to move forward</td>
<td></td>
</tr>
</tbody>
</table>
Bhamra, Daniab and Burnarda (2011) | Capability and ability of an element to return to a stable state after a disruption. Resilience is therefore related to both the individual and organisational responses to turbulence and discontinuities. This involves both the ability to withstand systematic discontinuities as well as the capability to adapt to new risk environments (Starr et al. 2003).

Whitman, Kachali, Roger, Vargo and Seville (2013) | Organisation’s ability to plan for, respond to and recover from emergencies and crises
Framing the Conceptual Landscape for Financial Resilience

Drawing on the general literature on organizational resilience and its dimensions, this section identifies possible dimensions of resilience that might be of relevance for operationalizing governmental financial resilience. Table 2 sketches possible dimensions of financial resilience and sums up related behaviors, attributes and possible indicators.

Table 2: Possible dimensions of financial resilience

<table>
<thead>
<tr>
<th>Time period</th>
<th>1 Prevention</th>
<th>2 Coping with ongoing disturbances</th>
<th>3 Immediate first level response to an adverse event</th>
<th>4 Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour</td>
<td>• Foresight, prevention, planning • Building flexibility • Creating redundancies</td>
<td>• Continuous monitoring • Prevent disturbances from becoming worse • Learning from ongoing disturbances</td>
<td>• Mitigate shocks • Preserve performance • Maintain operations</td>
<td>• Recover • Learning from disturbances • Long-term stability</td>
</tr>
<tr>
<td>Attribute</td>
<td>• Risk-awareness</td>
<td>• Flexibility/adaptive capacity</td>
<td>• Robustness</td>
<td>• Recovery ability</td>
</tr>
<tr>
<td>Operationalization</td>
<td>• perceived shocks and challenges • strategy to reduce vulnerability to risks and future shocks • management of sudden setbacks</td>
<td>• accumulation and use of slack resources • budgetary flexibility • fiscal autonomy • stability of financial condition • stability of service-level performance</td>
<td>• actions taken • stability of financial condition • stability of service-level performance</td>
<td>• learning and innovation • change in institutions and policies • perceived future risks • financial condition stance</td>
</tr>
</tbody>
</table>
As described above, general resilience literature identifies four main dimensions of resilience: *awareness of risk, adaptive capacity/flexibility, robustness and recovery ability.*

*Awareness of risk* refers to the ability to diagnose and prioritize problems and to initiate solutions, i.e. knowing the challenges a government may encounter in the future, and the actions government can take to reduce vulnerability to shocks (Mallak; 1998; Roe, 2009; Linnenluecke and Griffiths, 2013). Risk awareness involves deliberate prediction, anticipation or planning for disturbances in order to prevent undesirable outcomes. In financial management this activity requires identification and management of long-term risks that could affect the financial sustainability of government operations.

*Recovery ability* refers to the organizational capacity to survive and then to recover (“bounce back”) to the previous level of performance or flexibly adapt or adjust itself (“bouncing forward”) (Holling 1973; Vickers and Kouzmin, 2001; Shaw 2012; Pickett et al. 2004; Scotti-Petrillo and Prosperi 2011; Sundström and Hollnagel, 2006; Boin and Van Eeten 2013).

*Robustness* is the ability to withstand shocks without significant degradation or loss of performance (Bruneau and Tierney, 2007). This might also mean to operate with degraded (financial) performance in the short- or the long-term (Foster, 1993). Translating this concept in financial management, it means that (financial) resilience is about maintaining long-term sustainable financial health, as well as service level solvency in spite of disturbances.

In addition to recovery in the aftermath of a sudden event, a resilient behavior requires also *flexibility* to cope with ongoing disturbances that might become financially worse in the future. Martin-Breen Patrick and Anderies J Marty (2011) have proposed this situation as "chronic stress" and pointed out the need of a culture of resilience against small disturbances. This may require continuous monitoring for adversities and threats, and rooting out harmful situations, as
well as learning from the disturbances. Resource flexibility recalls the usefulness of traditional financial indicators of budgetary flexibility such as revenue/expenditure composition, fund flexibility, debt sustainability, etc. (Hendrick, 2004; Kloha et al. 2005; Wang and Tu, 2007) Also, it suggests the opportunity for building slack resources and redundancies. Rubin (2005) describes the accumulation of reserve funds that can be used in times of economic downturns as one possible strategy to increase flexibility and label it as “prevention”. Accordingly, “…setting aside resources for unanticipated contingencies is a practice that can help buffer the fiscal and economic consequences of crisis on budgetary allocations and government operations…” (Posner, 2009). Other scholars in this field have recognized the accumulation and use of reserves as a “…measure of performance of the financial management system…” and therefore as an indicator of financial management capacity (Hou and Moynihan, 2007). The existence of a strategy of interagency cooperation, partnering and shared services as a way to maximize the utility of existing staff and resources, might be yet another dimension to look for financial flexibility against uncertainty and shocks (Skertich et al., 2012).

Method

Our research project will at a later point go on to explore financial resilience through the use of an in-depth case study approach, focussed on a small number of local governmental institutions. The selection of cases required a preliminary analysis and comparison of behaviours both within and between each country (Italy and England). This was done using centrally collected and publically available government data on the financial performance of municipalities (Italy) and local authorities (England) over a ten year period (2002 to 2012), to ensure the consideration of a long enough time span to account for volatility of results over time. In order to consider entities subject to similar institutional and market pressures, the analysis was
focused on those Italian municipalities that are seats of province (a total of 117 Italian municipalities, as at September 2012) and those English local authorities classified as single tier and county councils (STCCs), namely unitary authorities, metropolitan districts, London boroughs and shire county councils (152 English councils in 2011/12). In England, a number of councils voluntarily reorganized in 2009/10, which meant that a full set of data was not available over the 10 year period and as such these were excluded from the analysis (leaving 141 STCCs analysed).

In order to select cases, we preliminarily had to identify an overall measure of performance. Moreover, we felt that, since resilience requires a long-term and dynamic view, we had to take into consideration a sufficient time span (10 years) and account for variability of performance over that time span. In government institutions, there is no universally agreed optimal measure of budgetary position, however there is generally an expectation that neither deficits nor surpluses should exceed certain thresholds. These considerations have traditionally encouraged governments to adopt policies to keep their actual budgetary positions around zero in the short to medium term.

In the light of the above, we identified the budgetary position as well as its volatility over time as important preliminary measures to be considered. The former can be measured by the ten-year average budgetary surplus/deficit, normalized as the percentage of operating turnover (hereinafter called “normalized surplus/deficit”). The latter can be measured by the standard deviation of the normalized surplus/deficit (hereinafter called “volatility”).

Direct comparison of the annual surplus/deficit positions of respective institutions in the two countries is not straightforward for a number of reasons. Firstly, the accounting rules within the two countries differ considerably, with Italian municipalities accounting on a commitment basis.
and their English counterparts using a modified form of full accruals accounting. Secondly, the data available is presented and focussed differently due to differences in central government reporting formats and in statutory requirements such as the minimum revenue provision (MRP) in England.

For the numerator in Italian municipalities, it is possible to identify two possible measures. The first is the year end commitment-based surplus/deficit position by updating the opening cash balance for the revenues to be recovered and the commitments to be paid in year. An alternative measure might the variation in the surplus/deficit position. The first measure is a stock measure, the second is a flow measure. In the present paper, we will consider both. For both measures, the sources are the AIDA PA and Ministero dell’Interno data sets.

For English local authorities, it is possible to identify from the annual Revenue Summary data set (RS) the annual contribution made to unallocated reserves. This represents the best possible alternative comparator of the variation in the surplus/deficit position, something verified by enquiry with accounting practitioners and used by the National Audit Office as a key financial measure. The annual contribution to unallocated reserves was therefore used as the flow measure in the English context, with the year and balance of reserves used as the stock measure.

Finally, the accounting years end at different points between the two countries, 31 December in Italy and 31 March in England. While this results in the annual financial positions being slightly offset, this was not considered significant given the long term nature of the study.

The key determinant in selecting an appropriate and comparable numerator unit of analysis between the two countries was taken to be the importance placed on the figure by decision makers within the respective institutions. In Italy, the more simplified accounting arrangements made the identification of the surplus/deficit relatively straightforward. In England, and based
on the presentation of the data available, the focus of analysis was considered to be the contribution to unallocated reserves as this essentially represents the only area of flexibility available to decision makers. It therefore represents the “balancing figure” between the Net budget requirement on the one hand and government grants and locally collected taxation on the other and is viewed similarly to the year-end cash position of Italian decision makers.

With regards to the denominator, in both countries we selected a measure that best suited the the ability to measure the relativity of the available numerator. As such turnover is represented by total annual income in the Italian context and net expenditure in England. More specifically, in Italy turnover is measured in the form of total income due to the municipality during the year (local taxation plus local tariffs plus transfers from higher levels of government), whereas for English local authorities it is measured in terms of net expenditure. In England this is reported net of direct income (tariffs in Italy) and service specific government grants, and is presented as balancing with the main non-specific sources of income (general government grants, local taxation and contributions to/from reserves).

**Preliminary Findings**

In this section we discuss the preliminary findings of the analysis, based on the classification of local authorities according to the measures of performance and volatility indicated above.

**England**

The English data for appropriations to unallocated reserves by STCCs over the ten year period 2002/03 and 2011/12, offers some interesting insights. Overall, as a group (excluding the outlier
councils\textsuperscript{2}), these councils made a contribution to unallocated reserves in each of the ten years. Collectively they contributed £1billion during the period, a collective average of £100million per year.

The picture within year for each type of authority (County Council, London Borough, Metropolitan District and Unitary Council), shows all authorities at some stage contributing both to and from unallocated reserves, with no single authority, and no single type, displaying a preference one way or the other. This potentially demonstrates that unallocated reserves may have been used as a buffer (means of providing slack resources?) over the period to fund disruptions and/or policy initiatives at the local level, although the more detailed analysis below suggests that this approach is not universal in its scope and reach.

Using the normalised surplus/deficit (unallocated reserves as percentage of net expenditure) and volatility (standard deviation of the normalised percentage) over the ten year period, it was possible to identify the array of English STCC outcomes for both the annual flow and stock of unallocated reserves. The analysis of the stock of balances can be thought of in terms of the capacity to absorb and plan for disruptions and disturbances. The analysis of the flow on the other hand is more a measure of the decisions taken in a particular year and could be planned or reactive.

The results of this analysis are summarised in figure 1 (stock) and figure 2 (flow) below for each local authority by type (County Council, London Borough, Metropolitan District and Unitary Councils) excluding the three outlier authorities referred to earlier.

With regards to the stock of reserves, 45% of local authorities lie within the 4% reserves level and 4% volatility region; 70% lie within the 6% reserves and 4% volatility region. This is generally suggestive of a low reserve base that is relatively stable over time for the majority of

\textsuperscript{2} City of London, Bromley and Isles of Scilly
authorities. Within the former region lie the majority of the county councils (81%), indicating that this type of authority has been generally stable over time with a limited use of reserves. Managing resilience for this type of authority may therefore be undertaken in other ways. There are 21 local authorities (15%) in the region above 8% reserves and 4% volatility. These organisations would tend to maintain higher reserve balances but also appear to be willing to use them on a significant basis. The highest level of stock volatility is around 10%. Interestingly this region is dominated by the relatively newly formed Unitary Councils, accounting for just under 50%. Even though this is only 22% of all Unitary Councils, it does suggest that some of this type of council may rely on building up and using general reserves when managing resilience.

For flow, 63% of all STCCs lie within the range of zero to 1% average contribution to reserves and 2% volatility, with 86% within a plus or minus 1% average contribution and 3% volatility. This represents a very compact clustering of authorities with low use of reserves and low volatility suggesting that reserves are being used selectively to manage resilience alongside other measures. This appears to apply to all types of local authority with over 80% of each type represented in this compact range, with county councils displaying the highest degree of concentration between zero and 1% (93%). However, there are other authorities that appear to buck this trend and seem to be making more flamboyant use of reserves. In particular 6% of authorities (of which 50% are London boroughs) have made relatively low average contributions to and from reserves (between -1% and +1%) but with a relatively high level of volatility (between 3% and 6%). This suggests a strategy of using reserves in a more proactive and managed way. Finally, 8% of authorities have an average contribution to or from reserves of greater than +1% and less than -1% but with relatively low volatility of between 2% and 4%. These authorities would appear to be either mainly contributing to or drawing from reserves over
Over the ten year period STCCs have as a group generally contributed to increasing levels of unallocated reserves, even in the years immediately preceding the financial crisis of 2008/09 and during the early years of central government’s austerity measures. This is the first sign that English authorities may not be using reserves as a way of mitigating funding cuts, but are rather using other forms of cut back management to deal with austerity.

Over the full ten year period 2002/03 to 2011/12, different approaches have been adopted by different types of authority to varying degrees. It would appear that county councils tend to adopt a fairly reserved approach to the use of unallocated reserves with relatively low levels of balances, low contributions to and from reserves and low levels of volatility. This group of councils would be useful to target in the next stage of this study as it seems to suggest that other factors may be at play when managing resilience. While some unitary councils appear to be adopting a similar approach, a sizeable proportion appear to have adopted a different strategy based on accumulating and maintaining relatively high levels of reserves that can then be used to deal with potential disruptions before being built back up again. This group of authorities would also be useful to investigate further. The analysis of flow data reveals two further groups for further analysis. Firstly there are those authorities that seem to use reserves in a more flamboyant way and are prepared to saw tooth between high levels of contributions to and from reserves and finally there are those who seem to be steadily either building up or drawing down their unallocated reserves.
Figure 1 – English STCCs - Unallocated reserves stock (2002/03-2011/2)

![Graph showing English STCCs Unallocated Reserves Stock from 2002/03 to 2011/12](image)

Figure 2 – English STCCs - Unallocated reserves flow (2002/03-2011/2)
Italy

Figure 3 shows the average normalised surplus/deficit (stock) by geographical position, identifying municipalities that belong to the North, to the Centre and to the South of Italy. Overall, the Italian Councils analysed tend to show a positive average normalized surplus (stock variable), with most Councils remaining within the 0-5% range of mean and the 0-7.5% volatility, and a second significant group laying between 5% and 10% mean and 0-12.5% volatility (Figure 3). Over the ten year period, municipalities from the north and centre of Italy tend to lie within the 0-10% mean and 0-10% volatility (respectively 82% and 79% of local municipalities), whereas only 40% of southern municipalities tend to maintain their position in the same region. Moreover, only in central Italy more than half of municipalities (58%) remain
within the 0-5% range of mean, with volatility ranging from 0 to 4%. In general, the highest level of stock volatility is reached by southern municipalities, that exceed 10% in 21% of cases (and the same applies only to one municipality in the north of Italy).

Figure 3 – Italian average normalized surplus by geographical position - Stock (2002-2011)

If we turn our attention to the variation in the surplus (i.e. the flow variable), most Councils lay in the -4% - + 4% range (94%), with most of them remaining in the 0-5% (68%) volatility range, and another important group in the 5%-10% volatility range (25%) (see Figure 4). This reflects also conventional wisdom, whereby the annual surplus (stock) should be between -3 and 5% of current revenues. On the other hand, the predominance of councils with low volatility appears to point out a preference, among most councils, for smoothing their results, or a good capacity to absorb (financial) shocks over time.
Moreover, combining the view on volatility and the one on performance, at least in descriptive terms, it is possible to identify most likely patterns of behaviours, whereby (i) (the few) very high average flows (both negative or negative) are accompanied by very high volatility, (ii) the numerous variations in the surplus (flows) around zero are also accompanied by very low (or nil) volatility, (iii) the average variations in the surplus (flow) are often accompanied by average volatility, (iv) similarly, high average stocks of surplus are accompanied by high volatility, and low average stocks tend to co-occur with low volatility.

As in the case of stock, the extreme values are reached by municipalities which belong to the south of Italy, as well as for the highest volatility values.

Figure 4 – Italian normalized surplus by geographical position - Flow (2002-2011)

Positive and high surpluses might on the one hand be the result of the growth and stability pact
constraints. At the same time, it is surprising to notice that even after the 2008-2011 crises most councils still appear to keep their surpluses positive and high.

The charts showed highlight different combinations of volatility and normalized surplus/deficit: this may be consistent with different approaches ranging from ensuring balanced budgets and high surpluses (high normalized surplus - stock and high volatility) to strategies based on deliberately accumulating surplus and slack resources (high normalized surplus - stock and low volatility), and from an apparent random use of resources (low normalized surplus - stock and high volatility) to a behavior based on maintaining relatively stable level of public spending.

Both the analyses of stock and flow data reveal that while a relative similar pattern is shown by northern and central municipalities (although with some specificity that will be interesting to analyse in future investigations), municipalities that belong to the south of Italy show a strong variability in the stock and flow cases and a greater positioning of local governments to the extreme values.

**Summary and conclusions**

For more than thirty years public management and accounting theories and practice have been strongly influenced by the search for efficiency, heralded by the New Public Management and similar public sector modernization movements. Public administrations have focused their attention on economy, efficiency and effectiveness, looking for cost containment, matching resources and goals, output maximization or input minimization. Even the wave of development of performance measurement and management tools have mainly emphasized the importance of short-term efficiency, often without
worrying too much about their ability to ensure public administrations’ responsiveness in the face of unexpected events and crises.

The present context of austerity and crisis calls for unusual solutions and new conceptual lenses to cope with the related challenges. One of these possible alternative views is resilience. However, no conceptualization of resilience in the financial and performance management of public entities has so far been provided, in spite of calls for increased attention towards organizational flexibility and adaptability in response to increased contextual volatility.

The paper has proposed a first conceptual landscape of adopting a “resilience” view in local government financial management literature and accounts for the preliminary results emerging from an ongoing project aimed at studying financial resilience in Italian and UK municipalities.

The initial analysis of local authority budgetary positions over a ten year period reveals some interesting contrasts both within and between the respective countries. These variations will be used to select a range of councils to be studied further through case study analysis in order to identify potential approaches to financial resilience and to provide a basis for the conceptualisation of resilience within the wider literature.

**Epilogue**

The preliminary analysis depicted above is the basis for the identification of multiple cases to be analysed in order to explore what financial resilience means in UK and Italian Councils, what its dimensions are as they emerge from the words of the people who are responsible for taking care of the financial health of those Councils, and what can strengthen or weaken financial resilience.
References (to be completed)


