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**Accounting for natural disasters:
involving flooded people into calculative practices**

Alessandro Lai

University of Verona

alessandro.lai@univr.it

Giulia Leoni

University of Cagliari

giulia.leoni@unica.it

Riccardo Stacchezzini

University of Verona

riccardo.stacchezzini@univr.it

ABSTRACT

Natural disasters require authorities in charge of the recovery to be accountable to all the subjects involved in the recovery process, as victims, operators and sponsors. Both accounting and non-accounting scholars recognize accounting systems as a useful tool after natural disasters to track and give account of damages, investments and reimbursements. Nonetheless, critical accounting literature argued that calculative forms of accountability may produce individualizing effects on the accountor creating “distance” between he/she and the accountee.

Seeing this critical perspective, the paper investigated the social aspects of the “accounting for flood” system arranged by the authorities in charge of the recovery from the devastating Italian flood of November 2010. The research found that accounting procedures activated after the disaster drove the construction of a “dialogue” among the recovery players: the involvement of flooded citizens into calculative practices played a crucial role in fostering the accountability process.

The paper contributes to critical accounting literature providing evidence of socializing effects of accounting and enlarging the possible research contexts for accounting scholars.

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1. Introduction

On Halloween night 2010, water filled 140 km² of northern Italy in just few hours. After three days underwater, 262 municipalities of the Region of Veneto, one of the most productive and rich area of Italy, faced a dramatic, challenging flood recovery and reconstruction. The state of emergency was immediately declared. Citizens, firms, and mayors of the flooded municipalities needed immediate interventions.

Noticeably, this inundation was neither the first nor the last one that happened in Italy. Actually, Italy has been frequently hit by floods in last decades and it is just one of the many countries with a history of floods.

Such events are relevant all over the world since they can cause deaths, injure people and destroy houses and buildings. Floods constitute relevant emergencies all over the world, causing deaths, injured and homeless every year. The EM-DAT (*i.e.* the international database generated by the Centre for Research on the Epidemiology of Disasters – CRED) shows that in the last two decades (1990-2011) 2,833 floods happened all over the world, mainly in Asia, America and Europe (Table 1). Such disasters killed 200,000 people and affected 2.7 billion. But they also provoke huge damages in terms of broken roads, collapsed buildings, broken riverbanks, closure of business and farming activities, house inundation and deterioration, and more. Then, recovery and reconstruction activities are crucial for people, firms and cities, but certainly expensive for National States. Economic consequences are relevant: it is estimated that in last 20 years (1990-2011), the damages caused by floods were more than \$ 650 billion (source: EM-DAT), indicating both the relevance of the issue for a National State hit by such disaster and the importance of managing and monitoring the expenses for recovery.

The huge expenses for flood recovery represent a relevant issue for governments facing such situations and accounting can become a useful tool for managing such expensive emergencies. However, only recently the topic of accounting in natural disasters received growing attention in critical accounting literature. In particular, the role of accounting and accountability in post-disaster recovery processes started to be investigated in contexts of earthquakes and bushfires (Sargiacomo and Ianni, 2011; Taylor *et al.*, 2011), but the context of floods and inundations is still uninvestigated under the lens of critical accounting research.

Focusing on Europe, Italy is the fourth country for number of floods, after Russia, Romania and France, with 24 big floods in the last 20 years, but it is the first for estimated damages, with \$ 20 billion (Table 2). The economic relevance of such disasters for Italy, together with the proximity to deeply investigate one of these events, encouraged to study the flood of 2010 in the Region of Veneto.

The paper investigates the “social aspects” of accounting in this flood recovery, identifying accounting as “constitutive of social relations” (Miller, 1994, p. 1) in an emergency situation. For its aims, the study uses a conceptualization of accounting as “the solution of problems using accounts” (Most, 1977, p. 2). This broader conceptualization considers accounting as “a method of making visible, and therefore governable, individuals, groups and organizations” (Carnegie and Napier, 1996, p. 16). When referring to “accounts”, “calculations” and “estimates”, the investigation does not denote a systematic bookkeeping system used by municipalities and the regional government during “ordinary times”. Rather it refers to the *accounting system* which was implemented in the recovery for the estimation of the damages suffered by individuals and institutions during the flood and for the collection of funds from the Italian central government and other sponsors. The term accounting here also refers to all the *calculative practices* in which the flooded people and mayors were involved in order to demonstrate the (economic) damages they suffered. These practices consisted of calculations to estimate the damages suffered by families (*i.e.* damages to purpose-built estate, registered personal property, and unregistered personal property), firms (*i.e.* damages to buildings, property, plant and equipment, inventories), municipalities (*i.e.* infrastructure, hydrographical network, garbage removal, road system, buildings).

Considering accounting as a “social practice” (Miller, 1994), the paper aims at discussing the role accounting systems and calculative practices played in the accountability process of this natural disaster recovery, since the use of calculative practices in an accountability relationship may create a “distance” between accountant and accountee, according to the critical accounting literature. To achieve its aim, the paper makes use of qualitative and narrative techniques of analysis, since it combined documental analysis, semi-structured interviews, and direct observation of flooded people when engaged into calculative practices and interacting with officers to apply for reimbursement.

The paper intends to contribute to the (critical) accounting literature in several ways.

Firstly, to our knowledge, this is the first work that critically analyzes the effects of the use of accounting in accomplishing a flood recovery and, more generally, a natural disaster. Actually, while accounting practices are often perceived as a tool to grant rationality, even in a disaster recovery, the paper offers a critical perspective on how such calculative practices became “social” (Miller, 1994), affecting the individuals’ behavior during a natural disaster recovery.

Secondly, the paper enlarges the possible context on which critical accounting analysis can be applied. Actually, whilst eminent scholars already investigated contexts other than organizations (*e.g.* communities, homes, etc.), so far the context of natural disaster recovery remained quite unexplored, even by those scholars interested in the public/political sphere (Sinclair, 1995; Broadbent *et al.*, 1996; Broadbent and Laughling, 2003; Bovens, 2005).

Finally, the study of accounting in such context challenges the idea that accounting – and calculative devices in general – may undermine an “encounter” between the accountee and the accountant engaged in an accountability relationship (Roberts, 1991, 1996, 2003, 2009; Shearer, 2002; Messner, 2009; McKernan, 2012). Indeed, in this investigation, accounting system is found to have favored “dialogue” and collaboration for the calculative practices among all the individuals involved in the recovery procedure, providing an alternative view to those contributions that ascribe “individualizing” effects to accounting (Roberts, 1991). “Dialogue” is here considered as the “encounter” among people, in line with the “interaction” defined by Habermas (1971, p. 72) and recalled by Roberts (1991, p. 360; 1996, p. 48). Anyway, here “dialogue” is not necessarily considered as the face-to-face encounter among people, but as an “experience” of interaction among individuals aware of their “inter-dependency” with others (Bryers, 2011a) and their “acknowledge[ment of] the value of the abilities and capacities of different others” (Roberts, 2009, p. 969). In this sense we agree with Morgan (1988, p. 477) when he states that “accounting should be approached as a form of «dialogue»”.

The research is carried out as follows. *Section 2* displays the theoretical frame on which this investigation rests, while *Section 3* presents the research methodology. In *Section 4* the recovery process and the construction of an “accounting for flood” system are presented, explaining the segregation of calculative duties among the players of the recovery. This section also outlines how such players familiarized with the accounting practices and how their involvement fostered a “dialogue” between governors and flooded people. Moreover, the process of accountability is showed to be strengthened by means of controls run initially by municipal officers and then by Italian customs, excise and tax crimes guard and European Union officers. *Section 5* discusses the results of the analysis and denotes the effects of accounting on the accountability process of the flood recovery. In this section the risks traditionally ascribed to formalized/hierarchical accountability based on calculations are found to be offset by the cooperation among the players of the recovery. Indeed accounting sustained a “dialogue” among people and institutions engaged into calculative practices. Contributions to (critical) accounting literature are here presented. Finally, *Section 6* summarizes some research implications and potential developments in critical accounting research.

2. Theoretical frame

When dealing with disaster and extreme events, scholars described post-disaster recovery processes as “complex” and “multi-faceted” (Labadie, 2008, p. 575). Governments at all levels

must hold themselves accountable, in the sense they have “the duty to provide an account or reckoning of those actions for which [they are] held responsible” (Gray *et al.*, 1996, p. 652): monitoring, calculating and auditing activities can facilitate the equity issues. Unfortunately, while transparency and accountability are strongly needed, “mechanisms for assessing whether recovery funds were well spent are often weak or missing” (Labadie, 2008, p. 575).

Calculative devices constitute useful tools which can help governors drive a recovery process. Scholars focusing on the social and economic consequences of natural disasters outside the accounting research streams, acknowledge that accounting and accountability systems can play an important role in the post-disaster reconstruction (Warren, 2007). In this situations, it is considered suitable for central governments to involve local governments in the collection of information and data for the recovery (Waugh, 1994), since the involvement of the whole affected community in planning for and implementing post-disaster reconstruction can guarantee equity and transparency during the recovery (Labadie, 2008, p. 580).

While the social and economic impacts of natural disasters in past and recent times cannot be neglected (Alexander, 1993 and 1997), such events represent a brand new issue for the (critical) accounting literature. In line with a recent call for researches on accounting and accountability for natural disasters and humanitarian interventions, Sargiacomo and Ianni (2011) investigated healthcare funds allocation after the 2009 devastating Abruzzo earthquake. They studied accounting numbers and disciplinary practices used by Italian national government to govern the emergency at a distance. Drawing upon the Foucaultian governmentality framework, they pointed out corruption processes related to the emergency and reconstruction interventions. If economic calculations appear to favor the governance of a disaster recovery, its actual role and effects need to be deeply investigated.

Taylor *et al.* (2011) studied the accountability of the recovery from the 2009 Australian “Black Saturday” bushfire. By investigating the accountability relationships between organizations and beneficiaries of intervention, they discussed the role of “downward” accountability comparing the accountability rated by governmental and non-governmental organizations involved in the disaster recovery. They found that independent NGOs poorly rated downward accountability to beneficiaries, since they built their intervention on direct deeds at a grass-root level, proving that “when very close relationship exists between the organization and its beneficiaries, no formal accountability may be required” (Taylor *et al.*, 2011, p. 20). In this work, accounting did not result as a tool to facilitate mutual understanding and social cohesion in a natural disaster recovery, rather alternative forms of accountability are found to be more suitable.

Accounting was discussed by Wilson *et al.* (2010) as a practice to govern and “maintain the ‘rational’ state of organizations” facing an extreme event, since calculative practices are deemed to be useful in “weighing the pros and cons and providing and insuring against extreme events” (Wilson *et al.*, 2010, p. 704). However, these scholars also found that such calculations for disasters are often under political control, which can lead to the risks that during a disaster recovery “the dominant coalition centralizes control by ensuring that only a few functional interests participate in decision making” (Wilson *et al.*, 2010, p. 699).

Futhermore, Samiolo (2012) recently showed the role of different “styles of calculation” in facilitating prevention from floods in the city of Venice, Thieken *et al.* (2007) found that more information about prevention may improve preparedness and response during natural disaster events, and Scolobig *et al.* (2012) clarified the link between awareness and preparedness in case of flood. Nevertheless, so far (critical) accounting literature did not clarified the role of accounting in driving a flood recovery.

The substantial lack of studies in accounting literature about the role of accounting in governing a flood recovery can be considered surprising for at least two reasons.

First, many countries result at high risk of floods (Barredo, 2009) and the social and economic impacts of such disasters can be dramatic and expensive. Flood disasters account for about a third of all natural disasters (Knight and Samuels, 2003) and flood risk assessment and quantification of

damages plays a pivotal role in limiting the consequences of flood disasters and in sustaining flood recovery respectively (Lindell and Prater, 2003).

Second, the debate about the role of accounting in sustaining accountability is not limited to business settings but focused also on public governments (Sinclair, 1995), communities (Jacobs and Walker, 2004; Jayasinghe and Wickramasinghe, 2007), homes (Walker and Llewellyn, 2000) and individuals (Boden, 1999). Actually, accounting represents “an influential mode of management of organizational and social arrangements in diverse range of settings” (Potter, 2005, p. 267). Although “accounting is at the centre of human relations and interactions [in] everyday life, [and] people continuously mobilize accounts as they render the world accountable” (Willmott, 1996, p. 26), its role in flood recovery remains unexplored and opened to additional investigation. Even in other types of natural disasters, the role of accounting in sustaining accountability remains unexplored (Taylor *et al.*, 2011) or concentrated on the risks of inappropriate uses of accounting by governors and officers in disaster recovery (Wilson *et al.*, 2010; Sargiacomo and Ianni, 2011). Definitely, these studies put some shadows over the role of calculative devices for governing an equitable and shared natural disaster recovery process, and more research is needed.

In a more general perspective, the debate about the role of accounting systems for systems of accountability (Roberts and Scapens, 1985) have attracted many scholars, which highlighted that calculative forms of accountability – that is an accountability based on calculative devices and other accounting tools – may undermine the actual responsibility of the accountant. Accounting, in particular, is expected to create “distance” between the accountee and the accountant – as making self-interest prevailing on common interest. Furthermore, it may also induce the accountant to represent only the bright side of his actions (Shearer, 2002; Roberts, 2009; McKernan, 2012).

This debate started with the seminal contribution by Roberts and Scapens about the conditions by which “accounting systems become embodied, through use, in organizational systems of accountability” (Roberts and Scapens, 1985, p. 443). Distinguished scholars started to analyze the role of accounting and other more “informal” tools for accountability (Laughlin, 1990). Roberts (1991, 1996 and 2001) introduced a distinction between two forms of accountability: on one side, the “hierarchical forms of accountability”, like financial accounting and other tools with a “calculative” nature (McKernan, 2012; McKernan and McPhail, 2012; Lowe *et al.*, 2012); on the other side, the “socializing forms of accountability”, represented by the forms of social accounting and informal communication based on a “face to face contact” between people (Roberts, 1991, p. 363) and facilitated by a “relative absence of formal power differentials” (Roberts, 2001, p. 1554).

Hierarchical/formalized forms of accountability are expected to generate “individualizing effects”, like the “narcissistic preoccupation with how the self and its activities will be seen and judged” (Roberts, 2001, p. 1553) and the risk that accountant maintains only a sense of “responsibility for the self” (Roberts, 2009, p. 967). More informal mechanisms of communication, like face-to-face interactions, can facilitate the “encounter” between the accountee and the accountant (Roberts, 2009, p. 967), stimulating “stakeholder dialogues” (Roberts, 2003, p. 256) and enhancing “a more compassionate form of accountability which expresses and enacts our responsibility for others, rather than just for myself” (Roberts, 2009, p. 967). Roberts summarizes the difference between individualizing and socializing forms of accountability as follows:

In contrast to hierarchical forms of accountability that generate a sense of self as singular and solitary, with only an instrumental sense of relation to others, [...] socializing forms of accountability have the potential to confirm self in a way that immediately acknowledges the interdependence of self and other, both instrumentally and morally (Roberts, 1996, p. 50).

After Roberts (1991 and 1996) critically denoted the role of accounting in effecting only hierarchical accountability and called for alternative forms – and transformations – of accounting to enhance socializing forms of accountability, research on accountability and its socializing forms proliferated.

Actually, as pointed out by Jones and Dugdale (2001), accountability started to be seen as a broader concept than accounting: accountability can contain many non-accounting elements, while accounting – in the sense of economic calculation – is (only) one of the possible forms of accountability. Anyhow, they clarified that accounting represents a fundamental tool which enables the support of the information flow to the accountability process. Jones and Dugdale's work constituted one of the few studies that concentrated on accounting in its interplay with accountability and its possibilities in enhancing social cohesion. Drawing upon the works by Kirk and Mouritsen (1996) and Ahrens (1996), they supported the idea that accounting can sustain systems of accountability whether accounting is “accepted as a useful language and relevant analytical tool” (Ahrens, 1996, p. 149; see also Jones and Dugdale, 2001, p. 39) and a “space” for accounting is “mobilized”, that means “be laid out, put into context, and acted upon in specific organizational situations and episodes” (Kirk and Mouritsen, 1996, p. 252).

More recently, other scholars offered new contributions to the debate about the individualizing and socializing effects of accounting and other accountability tools.

Jacobs and Walker (2004) asserted that the distinction between individualizing and socializing accountability is not clear. Considering the issue of accounting and accountability in the spirituality and practices of an ecumenical Christian group, the scholars found that “structures of socializing accountability, while perceived as positive and empowering, had the potential to function as forms of internalised surveillance and domination” (Jacobs and Walker, 2004, p. 361).

Furthermore, other recent works criticized the individualizing role traditionally ascribed to accounting. They shed lights on the possibilities of accounting in empowering the relation between the self and others and generating the socializing effects which are traditionally associated with dialogue and face-to-face relationships. Iyoha and Oyerinde (2010), focusing on the control and management of the public funds of a growing country, denoted the importance of record-keeping practices and accounting infrastructures in ensuring accountability and found that the existence of a recognized “accounting infrastructure” is fundamental in sustaining the accountability of government to the public.

In his studies about the worker cooperatives formed as a grass root initiative in Argentina, Bryer (2011a and 2011b) ascribed to accounting a social and aggregating function, contesting the individualizing role usually ascribed to accounting, and demonstrating that hierarchical forms are not self-centered as they are able to encounter other expectations: “accounting practices represented and constructed a form of inter-dependency that was sensitive to the needs and understandings of individuals” (Bryer, 2011a, p. 478).

Since the distinction between individualizing and socializing accountability appears to need additional investigations, at least for the individualizing effects of peculiar social accountability practices (Jacobs and Walker, 2004), the context of a disaster recovery represents an ideal context to debate the individualizing effects of accounting in terms of accountability. In this flood recovery, it was possible to investigate a social and institutional context (Burchell *et al.*, 1980) where accounting became a “social practice” (Miller, 1994) since all the people engaged in the recovery were also involved in the calculative practices for the estimation of the damages.

In this sense, the “collaborative involvement of accounting practices within social life” (Bryer, 2011b, p. 1) was investigated to detect whether calculative practices enabled the interaction and the “dialogue” among individuals and institutions, thus fostering the accountability of the governors in charge of the recovery.

To achieve its aims, the paper focuses on accountability in terms of “process” and not in terms of outcome, as suggested in seminal papers on accountability (Ahrens, 1996; Kirk and Mouritsen, 1996; Munro, 1996; Jones and Dugdale, 2001; Yakel, 2001; Bovens, 2010). Actually, a focus on the “methods by which participants engage in accountability relations” (Munro, 1996, p. 4) can contribute to a better understanding of how accounting supported accountability in disaster situations and flood emergency in particular. Accounting is investigated for its “involvement [...] within collaborative dynamics” (Bryer, 2011b, p. 1) between the officers in charge of the recovery

and the flooded people which had an active role in the calculative practices for the estimation of the flood damages.

3. Research methodology

The analysis of the role of accounting in this natural disaster recovery required paying particular attention to the accounting system and the calculative practices which flood victims and institutions were charged with. Moreover their perceptions and reactions in using accounting needed to be studied. Therefore, the paper combines ethnographic observations, semi-structured interviews and documental analysis (Moustakas, 1990; Riessman, 1993) according to the previous literature that investigated the role of accounting in fostering accountability relationships (e.g., Jacobs and Walker, 2004; Bryer, 2011a and 2011b). Such combination was aimed at fostering authors' interpretations from direct experiences, opinions and perceptions of all the people involved in the flood recovery.

The ethnographic analysis was based on three accesses to the municipal offices where flooded people met officers to ask for information and to apply for reimbursements. The authors' accesses to the offices took place in two different periods (*i.e.* one in February 2012 and two in December 2013) and lasted about half day each. In particular, two halves of a day were dedicated to the office of the main municipality hit by the flood and the other half of a day to the office of the municipality which counted the greatest damages. The presence in this office enhanced the direct observation of the encounters between flood victims and officers, their dialogues, their issues, their arguments about the reimbursement requests. Such observation highlighted the possibility to study the "involvement of accounting practices within social life" (Bryer, 2011b) to understand to which extent accounting represented a "social practice" in the flood recovery.

We also run a double round of semi-structured interviews with the representative of the main categories of the players involved in the flood recovery (Table 3). In particular, the interviews aimed at detecting the presence of relational activities in the accounting procedure and the development of mutual understanding, cooperation and involvement among the main players of the flood recovery. Both the rounds of interviews were conducted with flooded families and firms, representatives of the main flooded municipalities, the vice Extraordinary Commissioner for the Reconstruction (vice ECR) – which acted as a substitute for the ECR, and were responsible of the accounting system and other operative tasks – and other regional officers of the Flood Team, like the public relations office manager which directed and coordinated communication and information flows with citizens, firms, and municipalities. Flooded families and firms were interviewed to gain insights about their experience with the accounting system arranged by the Flood Team. Their stories helped clarify how they dealt with the emergency, interacted with their municipalities, and received support from local authorities in their efforts to account for their damages (Table 4). The representatives of the municipalities were asked about the implementation of the accounting system and their role of intermediaries between people and the Regional government. The vice ECR and the regional officers of the Flood team were questioned about their intervention in the recovery and the reasons for the arrangement of the accounting system (Table 5).

The first round of interviews was useful to familiarize with the recovery procedures. The second round involved a higher number of interviewees and was aimed at verifying the role of accounting in enabling the accountability process in the recovery. Together, the rounds enhanced the comprehension of the topics highlighted during the first round and detect the effects of the accounting systems on flooded people. Indeed, after coding the interviews from the first round, a second one resulted necessary in order to reach the saturation and confirm the existence of socializing effects in the accounting for damages procedures. In particular, interviews and documents were processed by means of the qualitative analysis software ATLAS.ti, which helped with the codification of the texts. It must be underlined that the software was useful for textual and data analysis, but did not substitute the researcher's reasoning. Actually the authors' interpretations were necessary to identify the coding and generate relations between the experiences of the people

involved in the recovery and the key concepts of individualizing and socializing effects of accountability.

Furthermore, we benefited from several primary sources provided by the players of the flood recovery: damages accounts personally filed by citizens and firms, then collected by municipality officers; aggregated accounts of damages prepared by the municipalities; the software realized by the regional officers to sum up all the requests of funds and then give account of the funds provided by the national government and the European Union. The examination of the documents were useful to understand the mechanisms in which the players of the recovery were engaged and the role of accounting in fostering their “interdependence”. The documents were matched not only with interviews and observations, but also with articles and opinions reported in local newspapers and other publicly available sources (Table 6).

4. “Accounting for flood”

4.1. *Flood emergency and accountability of disaster recovery: the need for accounting*

In October 31, 2010, after two days of nonstop rain, 140 km² of land were covered by water. Three people died in the flood, 6,670 were evacuated from their homes, as well as from three regional hospitals, and 500,000 people in 262 municipalities (10% of the population of the Veneto region) were affected by the disaster. Almost 3,000 firms were damaged, as the flood put a halt to industrial and farming activities and services. Livestock breeding suffered from the deaths of 230,000 animals. Furthermore, the territory was seriously damaged: 55 main roads broken, 51 landslides and collapses, and 15 riverbank breakages. The situation was worsened by the flooding of one of Italy’s principal highways, connecting Milan to Venice and Eastern Europe, which slowed the arrival of early relief and then continued to indirectly affect the business activities of the Veneto region for days after the disaster. Facing such disruption, national and regional government were asked to put in action first urgent operations and a complete recovery and damage relief program to help flooded people, firm and municipalities. The overall damage pertaining to families, firms and municipalities was initially estimated in 700 million €.

The 2nd of November, the Regional government immediately declared the state of crisis to put in action the first urgent operations (Table 7). Later, the 5th of November the National government declared the state of emergency and charged the Regional government with the whole recovery. The President of the Region was appointed with the managing of the emergency operations under the title of *Commissario Straordinario per la Ricostruzione* (“Extraordinary Commissioner for the Reconstruction”, or ECR).

The recovery process officially started the 13th of November with the decree no. 3906/2010. First of all, the decree stated the creation of a task force, named “Flood Team” under the supervision of the ECR. The Flood Team was charged with the managing of the recovery and the proper allocation of the initial funds of € 300 million, immediately provided by the National government.ⁱ Additional funds would have been required to the European Commission.

Since it was public money, the usage of the national funds – and eventually the European ones – had to be tracked and verified.ⁱⁱ To do so, the ECR, as the ultimate responsible for the recovery process, had to give account of the use of such public funds, meeting the expectations of both the National government and the victims of the flood. In this peculiar and urgent situation, where transparency is desirable, the implementation of an “accounting for flood” system to manage public money resulted “necessary”:

We have to act quickly and with complete transparency; aids and reliefs must be provided first to the families and firms, damaged by the flood (ECR Press Release no. 2052).

We are spending public money, thus we had to give account of the reimbursement provided to flooded people and the reconstruction works made. We had to put in place an “accounting for flood” system (interview with the vice-ECR).

The accounting system not only allowed the ECR to collect accounts of the damages and to apply for (Italian) central government and European funding, but also to support the “process of accountability” of the institutions officially engaged in the flood recovery. A clear example of how the “accounting for flood” system offered the ECR and the “Flood Team” the possibility to foster their accountability about the recovery – at least in a formal way – is given by the report “*Veneto. La grande alluvione*” (“Veneto. The great flood”), released under the ECR’s responsibility at the official end of the emergency phase (August 2011). The report represented a form of accountability of the ECR about the recovery process and the usage of public funds for relief and reconstruction, as the ECR explained at the beginning of the report:

“I wanted to give an account of public and private money, which were collected and already handed out: it is a positive balance and readable by everyone [*i.e.* the national representatives of Government and the flood victims, but also to the wide range of people, organizations and institutions involved in the disaster]” (“*Veneto. La grande alluvione*”, p. 3).

By means of the accounting system, the ECR collected information and data to give account of the flood consequences and the recovery results to the public:

This publication delivers the result of a commitment to the populations affected by one of the most tragic floods of the last two centuries in Veneto. The money allocated by the national government and the money collected from solidarity campaigns were used to help individuals and firms, and to open, immediately, sites to re-built a devastated territory, which are, for the majority, concluded (“*Veneto. La grande alluvione*”, p. 3).

Indeed, in the document the amounts of the damages suffered by each of the 262 municipalities hit by the flood are reported. The donations and the contributions are attributed to the different donors. Construction sites and reconstruction work are described and their prospective costs disclosed (Table 8).

Nevertheless, it is for such a form of accounting-based reporting – in which the accountant explains his activity in a “formalized” context – that critical scholars pointed out the risk that “individualizing effects” may arise, thus undermining both the sense of relatedness to each other” (Roberts, 2001, p. 1554) and the “shared resilience based on reciprocal understanding” (Roberts, 2009, p. 967). Actually, the report “*Veneto. La grande alluvione*” offers the ECR’s point of view about the flood disaster and its recovery. In the report many financial data were displayed to give account of the (bad) conditions in which the Flood Team had to operate. Furthermore, such data presented the results of the efforts made by the Regional government in responding to the emergency. Without the knowledge of the accountability process behind the scenes, this report could have been seen as a “narcissistic” attempt of the ECR to show the bright side of his actions.

As the following parts of this Section 4 will show, the flooded people were involved into calculative practices, thus actively contributing to the “accountability process” of the flood recovery. The empirical analysis supported the idea that such an involvement limited the risk of “individualizing effects” usually ascribed to calculative forms of accountability.

4.2. *Involving flooded people into calculative practices*

To arrange the accounting system to estimate the damages and record the expenses for reconstruction, pertaining to flooded families, firms and municipalities, specific issues had to be addressed.

Indeed, accounting for recovery meant that the damages had to be estimated, the expenses for reconstruction had to be traced and the reimbursements to the victims had to be verified and allocated. Unlikely the ordinary accounting of local and regional governments could carry out such peculiar tasks, thus an extraordinary accounting system was spurred:

For the use of the resources provided by the national government, the opening of a special accounting system is authorized in favor of the ECR (Decree of the emergency no. 3906/2010, §10, no. 2).

The activities that such accounting for damages required could be directly accomplished by the “Flood Team”, but this would have taken a lot of time in a situation of urgency. Actually, even in other big floods recently occurred in Italy (*e.g.*, Liguria, 2011; Tuscany, 2012) the governors decided to delegate calculative duties to flooded citizens and firms and to ask for the intermediation of the majors of the municipalities engaged in the floodⁱⁱⁱ. Therefore, the Team, while entitled to coordinate the whole recovery, delegated the accounting and reimbursing activities to institutions and people at lower level.

“Everyone took his/her responsibility. The ECR delegated many activities to the municipalities, while personally and daily checking the situation. This is because the mayors are the “sentinels of the territory”, they have the social control of the territory and are able to filter the information essential to the Region.

The communities must learn to manage themselves independently, clearly with the support of the institutions. In fact, we have experienced a social model based on few core values: people are involved through the municipalities but they are not left alone. The collaboration with the mayors was essential and their response were brilliant. By the way, given that the elections were far away, the mayors were not concerned about them. However, I’m not sure that this model based on delegation would be easily exportable to other regions of Italy where federalism is not so supported by the regional authorities” (Interview with the Regional officer 1).

“We kept very close relationships with the municipalities because usually, but especially during emergency, citizens turn to the municipalities and not to the Region” (Interview with Regional officer 2).

Extraordinary formalized procedures were stated, in which calculations had twofold aim: on one side the calculations were necessary to accomplish the reimbursement procedure and help flooded people in need, on the other side, such accounts were fundamental to give account of the recovery process and the public money spent by the ECR.

Within the formalized procedures stated by the ECR, every “player” of the recovery had its own duties.

On their part, the *ECR and the “Flood Team”* had the main responsibility for the arrangement of the “accounting for flood” system, for the equal allocation of the reimbursements and for the controls over damage claims. Moreover, the Flood Team made use of an *ad hoc* software, expressly created for the recovery program, to gather all the accounts collected by municipal offices of the town hit by the flood (Table 9).

On their part, *municipalities* were appointed by the Team with the execution of the relief program, namely the collection and the control of the requests and the distribution of

reimbursements (Tables 10 and 11). As the mayor of one of the interviewed municipalities explained:

We re-organized our offices and arranged a dedicated front desk for the accounting for damages procedure in which municipal officers worked every day for the following year. They collected and processed the applications for reimbursement, then verified the request directly on the applicant's properties and recalculate the amount due as damage refund (Interview with municipal Mayor 1).

Such commitment is confirmed by the words of an administrative officer of one of the flooded firms:

The Municipality intervened between the region and the flood victims. Some officers of the municipality came twice on our property. The first time they verified if we have heard about the possibility to obtain a reimbursement; the second time to check if we had the receipts and invoices of the expenses of the reconstruction works to attach to the reimbursement request (Interview with flooded firm 3).

This confirmed the declarations of the ECR, who announced his willingness to charge municipalities with the gathering and the verification of the reimbursement requests:

I will give mayors money to reimburse their citizens for the flood damages [...]. The Regional government did not address calculative practices and this was a great innovation in recovery processes. It was not usual to do so, but I wanted to give a prompt response. At the moment, teams of experts are checking the requests. If someone pretended to be damaged by the flood, he/she will be punished, in the interest of the genuine flood victims (Giornale di Vicenza, "ECR: I will give mayors the money", May 12, 2010).

On their part, also *citizens and firms* were charged with a part of the accounting procedure. If they wanted to apply for reimbursements of damages and reconstruction works, they had to account for lost goods and estimate their damages in term of costs of substitution or reconstruction (Table 12). As highlighted by Regional officers, the recourse to a calculative device was a staging post for the flooded people:

We wanted to be very strict. We had public resources and we could not allow them to be allocated to subjects who did not use properly our format to account for the damage suffered. We made only few exceptions for cases reported by individual mayors, really extraordinary cases of elderly people with limited financial resources (Interview with the Vice ECR).

They then had to fulfill the request for reimbursement and prove the incurred expenses by means of budgets and invoices. The citizens were aware of that:

The Region wanted me to estimate the damages and budget the reconstruction expenses. Then I had to fulfill an official request format with the results and bring them to the municipal offices for processing (Interview with flooded citizen 1).

In this respect, a sort of "inversion" in the accountability relationship took place: the ECR became the accountee to which the citizens and firms – with the intermediation of the municipalities – had to give account of the damages they suffered during the flood. Considering the risk of "individualizing effects" ascribed to calculative accountability, a critical analysis asks for

considering the risk that citizens and firms could find in accounting for their damages a misleading way to obtain greater reimbursement than their actual damages, trying to let self-interest prevailing on the common interest. Such a risk sums up with the above mentioned risk that the ECR could use accounting just to give account of the bright side of his actions, giving way to a “narcissistic” preoccupation about others’ judgment. Considered these risks together, the “possibilities of accountability” (Roberts, 1991) to reach socializing effects and to sustain a “dialogue” among all the players of the recovery could have resulted quite limited.

On the contrary, the research found that the accounting procedures helped enhancing the “dialogue” among such players, thus sustaining the “process of accountability” by which the ECR and the “Flood Team” gave account of their actions and results.

4.3. *Accounting and the dialogue*

Since the beginning of the emergency, the accounting procedures were meant to rest on the collaboration of people and municipalities, as the ECR immediately realized that a face-to-face relationship was not possible. Therefore he had to go beyond any possible “narcissistic preoccupation with how the self and its activities will be seen and judged” (Roberts, 2001, p. 1553):

“Maybe the Region won’t be able to meet the citizens of all the municipalities hit by the flood, but through the interposition of mayors and municipalities flooded people must perceive our support and our commitment in recovering as soon as possible (Giornale di Vicenza, “Within Christmas deposits in advance for families and firms”, November 19, 2010).

In this recovery, we do rely on the collaboration of key-players, such as the mayors of the municipalities and all the citizens and firms, for which we will immediately draft the guidelines with easy instructions. And to let them know what to do and how to act in this situation, we will need the help of all media and journalists (ECR Press Release no. 2052).

To facilitate such collaboration and create a “common ground” (Merleau-Ponty, 1962, p. 354; Roberts, 1991, p. 362), the procedure included the provision of instructions and the support by municipal offices. Indeed, on the 26th of November 2010 (26 days after the flood) the Team released “*Alluvione che fare*” (“Flood: what to do”), a collection of guidelines to explain the procedures to enter the relief program. The procedures were explained in form of FAQ (frequently asked questions), and the statement to present the calculations were provided together with the guidelines. Aside the guidelines, the 28th of November, the Team created an official web site (www.venetoalluvionato.it) to assist continuously citizens and firms with the reimbursement procedures. Both the guidelines and the website aimed at illustrating the procedure to the people and communicating the two alternative deadlines for apply for reimbursements. This form of interaction prevented flooded citizens from the “potential for alienation in this process” (Roberts, 1996, p. 44).

The 6th of December 2010 was the deadline for the presentation of all the estimates and the accounts to obtain a deposit in advance before the end of the year. This procedure required to submit the total amount of damages on which the Team and the municipality could calculate the deposit (30% of the request). This first deadline aimed at help out those citizens and firms in need of money for starting the reconstruction works. Then, citizens and firms could receive the residual reimbursement – or eventually had to return the deposit – after the municipalities had run controls on the accounts and the invoices^{iv}. The second deadline was the 20th of February 2011. By this date, everyone who aspired to a reimbursement had to submit the request with the final estimations, accounts and receipts. In this case no deposit was provided, but only the reimbursement after the

controls on the request. Someone decided not to ask for the deposit, and applied for reimbursement on the second deadline^v.

The help provided by the ECR and the officers of the municipalities was aimed at “achieving understanding” (Roberts, 1991, p. 360) and was appreciated by flooded citizens, who did not perceived the reports required by the authorities as an attempt to create a “constant surveillance” (Roberts, 2001, p. 1553) over them:

To fulfil the request, I followed the guidelines released on the official website of the flood. The protocol was relatively simple and easy to fill, especially considering that we live in Italy, a country strangled by red tape. I did not hear of any problems neither from neighbours nor relatives (Interview with flooded citizen 3).

Honestly, I had no difficult to understand how to complete the form. And, from home, with the internet connection, it was easy to download the documentation. Perhaps older people may have encountered some difficulties, but special offices of the city of [...] offered their help (Interview with flooded citizen 7).

Furthermore, the necessity to account for damages and expenses led people confronts each other on a “common ground” and asks for advice. There were those who asked their friends and neighbors:

I helped almost all of my neighbours. In particular, individuals less accustomed to calculations had some difficulty in technical issues and damage estimation. Even people with high level of education, they needed help from a technical point of view. I gave advices on how to find information and data for the estimates, but I was not asked for help filling the forms, since they were relatively simple (Interview with flooded citizen 6)

There were others instead, who experienced a face-to-face dialogue, asking municipal offices for help. At the same time, the Regional officers experimented “actions oriented to achieving understanding” (Roberts, 1991, p. 360) by changing some of the forms citizens had to use to apply for reimbursements.

The municipality also settled a help-desk for people who needed help in the preparation of the claim for reimbursement. At the help-desk operated employees of the Municipality who were trained on this emergency procedure. The need for this direct contact appeared clear, since the office was “attacked” by the people who needed help and information for the reimbursement request (Interview with municipal mayor 2).

The forms provided during the first days after the flood were changed: in fact the citizens pointed out that with these forms there was no opportunity to report certain types of damages and consequently the Region replaced them within twenty days (Interview with municipal officer 1).

The municipality opened help desks both in the city centre and in the suburbs. The offices were managed by municipal employees who volunteered to help with the procedure. Once the offices opened, people came and ask for help in fulfilling the request or demanded information on the invoices to be provided.” (Interview with municipal officer 2).

I haven't heard about companies that did not make the request. The Municipality has always done the best to help people to apply for the reimbursement. I assume that the companies that did not required the contributions were few (Interview with flooded firm 5).

Such help prevented citizens to acknowledge “the self as essentially independent and solitary”, a consequence of individualizing effects of accounting, as pointed out by Roberts (1996, p. 44). Municipal officers offered assistance to citizens and firms, explaining the procedure and giving advices one to one. While the support between citizens resulted more informal, the municipalities offered such support according to the tasks delegated by the Flood Team, when the recovery structure was settled. To achieve their tasks, municipalities arranged help-desks and door-to-door assistance to help people with the accounting for damages, interacting directly with affected citizens. Municipal officers dialogued with victims, explaining the procedure and assisting them with every doubt in fulfilling the request.

The Municipality remained in contact with the companies by e-mail. Actually every flooded citizen and firm was recorded on a database and received communication by e-mail on the status of their reimbursement process. The person in charge called directly the people giving specific information about how to behave and also how to act to obtain the contributions. There was a “special care” because the person in charge was aware of each particular situation. The support of the municipality officers and their explanations helped citizens understand that the problems were generated at the regional level. The municipalities found themselves dealing with situations not always easy as well as with tight deadlines for submission of applications. In order to make sure that everyone could obtain the reimbursement, they created this network of communication and constant contact-assistance to flood victims. Every time the person of the municipality in charge of this work asked for documentation she explained us the reason and we understood that there was a need at the Municipality for the Region and not a capricious request. The difficulty of filling the forms was always resolved by the employees of the Municipality that in front of mistakes or problems directly called the company for clarification and to check the application. The person responsible explained and dialogued with the flood victims. The city employees were exemplary. Once they received the management procedure from the Region firstly they studied it and then they deal with the individuals explaining in details the reason of each request. The reasons were usually linked to new procedural requirements from the Region (Interview with flooded firm 5).

The presence of help desks and door-to-door assistance favored the presentation of the requests for damages by flooded people, providing the ECR with actual information about the damages and authentic justification for the use of public money. Thus the ECR and the “Flood Team” reached a “personal understanding [...] of others’ views and expectations” (Roberts, 1991, p. 363). The presence of a dialogue between municipalities and flooded people was detected in several interviews, but the opinion expressed by the administrative officer of a flooded firm is noteworthy:

Here in the Municipality of [...], the employees were stainless. Every time they received new instructions from the Regional government, only after they went through them, they encounter each flood victim, explaining in detail the procedure. In particular, the person in chief of this recovery office was always there, explaining how to do and responding to every question or doubt we had. In case of errors or problems with the information we provided, the officers always called us to make sure we redressed the error. The person in charge even called people directly, giving specific advices on how to proceed to obtain the reimbursement promptly (Interview with municipal officer 2).

Furthermore, municipal offices did not only dialogue with citizens and firms, but also with the “Flood Team”. They asked the Region help in the interpretation of the Decree and the procedure, they indicated special cases which required specific attention. Furthermore, the Flood Team organized several meetings with mayors and municipal officers to answer question and doubts.

During one of these meetings, the vice-ECR, who supervised each meeting, clearly “acknowledg[ed] the value of the abilities and capabilities of different others” (Roberts, 2009, p. 969) – *i.e.* mayors and municipal officers – and the intent of sustaining the dialogue with citizens and municipality:

It might not be possible for the Region to meet the citizens of all the municipalities affected by the flood, but by means of the mediation of the mayors they will feel our closeness and our commitment to respond to the disaster as soon as possible (Giornale di Vicenza, “Within Christmas deposits in advance for families and firms”, November 19, 2010).

In brief, the “accounting for flood” system and the related calculative practices favoured a “dialogue” among authorities and flooded citizens, thus offsetting the Regional officers’ impossibility to establish a face-to-face relationships with each flooded citizens. Accounting did not lead officers and citizens to shelter behind their positions and to looking for the “success of the self” (Roberts, 2001, p. 1553), but it actually facilitated their “encounter” (Roberts, 2009, p. 967) with citizens, making everyone aware of their recovery process “inter-dependency” (Bryers, 2011a). In this case, it is not true that the recourse to calculative devices and accounting-based reporting undermined the ECR’s “responsibility for the other” (Roberts, 2009, p. 967): the delegation of duties to municipalities, citizens and firms; the help desks in each flooded municipalities to respond to the concerns of the flood victims; the change in the request formats to ease the compilation, are just examples demonstrating how accounting served to “encounter” the flood victims and to involve them in the recovery, rather than to “distance” them.

Furthermore, the wide recourse to the delegation of duties to flooded citizens could have favoured their inappropriate behaviours, thus undermining the “credibility” of the accountability process (Jayasinghe and Soobaroyen, 2009, p. 1015). Actually, to prevent such possibility, the “Flood Team” established a wide range of controls over the citizens’ and firms’ calculations for damage reimbursements.

4.4. The credibility of accounting calculations

The “accounting for flood” procedure entailed also a phase of controls on all the submitted requests. Both the requests for which a deposit was provided and those ones presented at the second deadline (February 20th, 2011), had to be controlled:

We chose to provide payments in advance on the basis of trust, but for the full payment receipts, invoices or budgets are necessary (L’Arena, “Reimbursement, but not for everyone”, January 5, 2011).

In march 2011 the controls started. Volunteers from the municipal offices and external technicians were enrolled to run controls on each request submitted by families and firms. Each “controller” had 20 requests to process and could access to the Regional database where all the requests were recorded. After checking the documents, he ran the controls directly on the properties of each requesting citizen to verify the consistency and the causality of the damages (Interview with municipal officer 2).

The controls were established since the beginning of the accounting system construction to avoid any error or fraud by flooded people. The overall controls aimed at verifying the consistence of all the requests with the criteria indicated in the procedure and they were delegated to municipalities. Municipal offices assigned the controls to municipal or external experts. Firstly, the experts had to verify if the damages for which the reimbursement was required, were caused by the flood. Secondly, they verified the adequacy of the request, checking whereas the budgets and the invoices corresponded to the expenses reported. Thirdly, the request had to be compared with a

price list drafted by the Flood Team to determine the maximum amount that can be reimbursed. According to this list, a price ceiling was associated to each type of (reconstruction) work and property, fixing the minimum expense that was considered sufficient to restore normal activity and conditions.

The possibility to account for their own damages to obtain a reimbursement could induce people to provide misleading information to get a higher compensation. The knowledge of final controls on the requests was meant to prevent from such behaviours and in Jacobs and Walker's (2004, p. 378) words, to "laud [... the citizens'] openness [...] and their identity as a member of" the recovery process:

In case of incorrect provision of money, based on false declaration, there will be the controls at municipal level, and I have complete confidence in the mayors." (Giornale di Vicenza, "«I would like less suspects»: interview with Zaia" December 19, 2010).

The opportunists will not take any money. The Region and the municipalities will carry out controls on all the submitted requests. No one dare to think of getting away with it (Giornale di Vicenza, "Tajani: from EC 25 million euros", November 13, 2010).

Beyond the risks of fraud, controls were useful not only to account for the National funds provided (€ 300 million), but also for prospective European funds that would have eventually be provided by the European Commission. In November 2011 the European Commission approved the provision of additional funds for the Veneto region^{vi}. Lately, in November 2012, the European Commission ran its controls over the expenditure of the European funds, as reported in a local newspaper:

Inspection today in the Veneto region by inspectors from the European Commission, responsible for checking if EU funding for flood emergency has been spent properly and effectively (Giornale di Vicenza, "Flood: European inspectors check the expenses of Vicenza", November 9, 2012).

Controls supported the process of accountability of the ECR by reinforcing transparency all along the recovery process and preventing misconducts by people engaged in calculations. Actually, as the Abruzzo earthquake case had taught (Sargiacomo and Ianni, 2011), corruption and misconducts could cause the failure of the recovery process and consequently, a reputational damage for the Regional government^{vii}. Controls could guarantee an equal compensation for everyone hit by the flood. Thus, victims showed a collaborative attitude during controls and a "deeper sense of their relatedness to each other" (Roberts, 2001, p. 1556):

I ask for the full commitment of everyone because controls are necessary to guarantee equity in the recovery for each flood victim (L'Arena, "Scrap cars and fridges: experts count for damages", January 22, 2011).

The municipal and external experts were always received fairly well, because the victims knew the controls were not a lack of trust, but a guarantee of equity in the reimbursement procedure (Interview with municipal officer 2).

I did not perceive any pressure during the controlling phase. I did everything according to the rules, I had nothing to hide and I presented every document to the municipal expert. I was relieved about knowing of the controls on every request. In this way no one could mislead the procedure and take advantage of the situation, as frequently happens in Italy (Interview with flooded citizen 8).

Thus the controls were substantially kindly accepted by citizens and firms and were not perceived as mistrust in their estimates, rather as a tool to assure equity and avoid counterfeit in the

recovery. Although in some ECR's declarations it is possible to "trace" an idea of establishing a "constant surveillance" (Roberts, 2001, p. 1553) over flooded people, the controls run by officers did not result "embarrassing and intrusive" (Jacobs and Walker, 2004, p. 378) in the citizens' perceptions:

The municipal officers were received quite well by the flood victims because they have always thought that the reason of some mistakes pertained to the Region and not the municipalities (Interview with municipal officer 1).

The request for additional information came directly to the flood victims by the municipality, but we understood that it was always justified and explained in relation to new demands from the Region (Interview with flooded firm 5).

The controls started in March 2011 and lasted one year, since every single request had to be checked directly on each claimant. At the end of the procedure, the amount requested could be confirmed, revised or denied. Moreover, some deposits had to be returned, whereas there were no conditions for reimbursement. Every municipality was required to record the results of this audit procedure in the dedicated software, matching each single request with the results of the controls and calculating the final amount due or to be returned^{viii}.

Therefore the controls appeared to have strengthened the sense of inter-dependency among all the players of the recovery. They favored "the development of accounting practices [which] forms an integral part of the relational activities through which [individuals] learn and develop understandings of themselves and others" (Bryer, 2011a, p. 480) and they denoted the possibilities of such accounting practices in fostering "accounting's sociability" (Bryer, 2011a). By means of controls, no one could challenge the fact to be part of "something bigger" than their own private refund, as highlighted by a representative of one of the involved provinces at the end of the emergency phase (August 2011):

I want to emphasize the honesty of Veneto citizens who did not take advantage of the flood to submit false claims. The result [...] proves once again that with commitment and honesty we can give people practical answers in short time (Padova oggi, "Flood, reimbursements to people and firms. The Vice President of Padua: «A miracle»", August 8, 2011).

5. Discussion

The flood recovery of Veneto Region shed light on the use of accounting in emergency situation, when complexity grows and equity and transparency are required. In this investigation accounting arose as a suitable tool for responding to disastrous events, in a context where "mechanisms for assessing whether recovery funds were well spent are often weak or missing" (Labadie, 2008, p. 575).

In this Italian flood, the construction of an *ad hoc* accounting system and formalized procedures based on a segregation of calculative duties among the players involved in the recovery, favored the accountability of the recovery. Indeed, the accounting system supported the officers – as they were "obliged to publicly explain and justify [their] conduct to a specific forum" (Bovens, 2005, p. 185): they were able to provide information and data about the damages suffered by each of the 262 municipalities, the reimbursements provided, the donations and the contributions from Government and donors and the costs for reconstruction works.

Indeed, during the emergency, the accounting system served to account for the damages suffered by people and cities, calculate and provide the reimbursements funded with public money and run the controls to grant an equal relief program. Actually, accounting confirmed its central role as a "relevant analytical tool" (Jones and Dugdale, 2001, p. 39) both for flooded people asking for

damage compensations and for the ECR when he had to give account about the recovery process and results.

Accounting was embodied as a formalized procedure for which the ECR and the victims account for actions and for damages, respectively. As underlined in the ECR's declarations and confirmed by the interviewed citizens, the "accounting for flood" system facilitated the cooperation among all the people involved in the flood emergency. In this situation of emergency and shared distress, the ECR relied on the accounting system to enhance a continuous information flow, which could lead to a prompt reimbursement of the damages for the victims and to a sound accountability of the recovery results for the ECR himself.

According to the critical accounting literature, the effects of the recourse to calculative forms of accountability are not always positive. Also in this recovery, the use of accounting could have generated individualizing effects, namely "a sense of self as singular and solitary, with only an instrumental sense of relation to others" (Roberts, 1996, p. 50). The use of accounting could have produced distortion in communication and misrepresentation of the actual actions accomplished by the ECR and the actual damages suffered by flood victims. Even if it was meant to be a mechanism to drive information from people to Regional representative, in order to satisfy people's need for relief and ECR's need to justify the expense of public money, accounting could have facilitated the ECR's indifference to flood victims or enhance the victims' misrepresentation of the actual damages. Miscommunication and distortion of the actual damages and the recovery results could have led to the failure of the relief program and also the final accountability of the ECR.

On the contrary, accounting was found to facilitate the dialogue among the players of the recovery, which fostered the information flow from the populace to the ECR about the actual damages of the flood. In this respect, the investigation found that the accounting system was able to avoid distortion and misconducts by the individuals who were charged with the accounting activities. The guidelines and the instructions provided by the Flood Team, the help-desks opened by the municipal offices and the informal advices between flood victims testified the constant dialogue and cooperation among these individuals. Indeed, the accounting system supported the ECR's intention of a sound accountability about the actual consequences of the flood and the transparent reporting of the expenses. This dialogue prevented from the risks of individualizing effects of the accountability provided by the ECR. Actually, the ECR could have used the calculation provided by flood victims in a distorted way, to focus public's attention on the brighter side of the recovery. This did not happen, since municipal offices and victims were involved in the production of such information and could act as "witness" of the real actions of the ECR.

In this peculiar case, in which part of the accounting activities were assigned to flood victims, another risk of individualizing effect of accountability rested on the distorted use of accounting by these individuals. Flooded people could use accounting to misrepresent their actual damages and expenses, thus invalidating not only the final accountability of the ECR, but also the equity of the recovery. In this sense, the accounting system could prevent from the acknowledgment of that "interdependence of self and other, both instrumentally and morally" described by Roberts (1991, p. 967), which was particularly important in this situation of emergency and shared distress.

On the contrary, this risk was limited by the accounting system, which included a controlling mechanism on the information provided by the victims. Such controls formed the final part of the accounting procedure and were run on each request of reimbursement. Even this controlling phase was based on and facilitated the cooperation among the players of the recovery. The Flood Team encountered the municipal offices, which were in charge of the controls, to explain the control procedures and the rules. The municipal offices contacted each applicant victim to apprise them about the controls. Such coordination helped the populace understand the need for controls and accepted them as a mechanism to guarantee equity all along the recovery.

Finally, the investigation verified that accounting is able to enhance socializing effects among those individuals – the ECR and the populace – who were expected to show misleading behaviors and selfish attitudes in using accounting. The accounting system of this recovery fostered a continuous collaboration among the players all along the recovery, which helped inducing flood

victims signal their damages, thus fostering an unquestionable accountability about the recovery, based on actual data.

The accounting system arranged by the ECR enabled “the relational activities through which [...] members learn and develop understanding of themselves and others” (Bryer, 2011a, p. 480), confirming the role of accounting as a “social and institutional practice [...] intrinsic to, and constitutive of social relations” (Miller, 1994, p. 1). Accounting encouraged an “iterative process” (Yakel, 2001, p. 233) where flooded people and the ECR reciprocally take and give accounts of actions and damages. Here, accounting arose as a “relevant analytical tool” which helped “structuring relationships between actors and between systems” (Jones and Dugdale, 2001, p. 58) in the recover process.

In this respect, this investigation mitigated the arguments of those critical accounting studies warning about the risks of individualizing effects due to the use of accounting. Actually, this flood recovery showed how accounting practices enhanced socializing effects of accountability, namely cooperation and cohesion for the construction of an accountable recovery. Accounting was able to develop relational activities and mutual understanding among the recovery players, since it provided a common and unambiguous language which helped sharing information about the needs of flooded people and the actions of the ECR. It facilitated the “encounter” between the ECR and all the players of the recovery, in a context in which “dialogue” was necessary to face the collective tragedy.

The research not only showed the “social constitutive role” of accounting but it also pointed out how such a role may be favored by the engagement of the accountees into the accountability process. Just as flooded citizens acted as accountor for their damages, they became active “participants” (Munro, 1996, p. 4) in the accountability process, thus favoring and sustaining the whole accountability of the recovery process. Since Jacobs and Walker (2004, p. 361) highlighted that “the distinction between individualising and socialising accountability is not clear”, many researches have faced this issue. In line with these contributions in contexts other than natural disasters, Jacobs and Walker (2004, p. 361) showed that socializing forms of accountability may produce individualizing effects as they may “function as forms of internalised surveillance and domination”. On the contrary, the present paper, studying the effects of the calculative forms of accountability, demonstrated the role of accounting practices as “constitutive of social relations” (Miller, 1994, p. 1). Moreover, while Bryer (2011a, p. 478) highlighted the possibility that accounting practices “represented and constructed a form of inter-dependency” among worker cooperatives, this paper offered new insights on how accounting may favor inter-dependency among subjects which do not usually operate in the same institutional/organizational context (the ECR and the “Flood Team” on one side, the flooded people on the other side). In this respect, the present paper may illuminate researches aimed at verifying how individuals from different contexts may be engaged into calculative practices preventing from “solitary”, “constant surveillance” or other individualizing effects which might undermine accountability.

Moreover, while Jayasinghe and Soobaroyen (2009, p. 1014) showed that “formal accountability mechanisms [may be] irrelevant” when accountee are highly confident in the accountor’s conduct, this research pointed out that formal calculative devices and related controls over accounting practices can strengthen those critical accountability relations among people and institutions engaged in a natural disaster recovery. Therefore, the study may contribute to those researchers concerning the relationship between accountability and trust. Moreover, it offers insights for those investigations – like Jayasinghe and Wickramasinghe (2007) –, which focus on the introduction of accounting practices in a community and the reaction of people when “engaged in certain calculative practices” (Jayasinghe and Wickramasinghe, 2007, p. 183).

Finally, the paper provided new insights for the analysis of the accountability relations between governors and citizens, since its findings may give a contribution to those analyses on the individualizing and socializing forms of accountability in public-political arenas – like Broadbent *et al.* (1999) in the educational context.

6. Conclusions

The objective of this research has been to illuminate the role of accounting during a natural disaster recovery. This analysis of the 2010 Italian flood recovery has highlighted the potential of accounting to enhance accountability throughout a relational and dialectic path that involved people, firms and municipalities into accounting practices. Accounting did not just emerge as a device for taking account of the damages suffered. Instead, it showed its possibilities of enhancing relational activities and dialogue among the players of the flood recovery, performing a socializing-function. In this sense, our study widens Roberts' (1991 and 1996) considerations about the individualizing role of accounting, showing how calculative practices, instead of being an obstacle, can facilitate the dialogue between the accountant and the accountee. The findings offer new insights to the idea that "accounting is not simply a tool to rationalize the irrational or to reinforce hierarchical power relations, but can enable individuals to articulate their particular needs [...] and learn and develop understandings of themselves and others", as underlined by Bryer (2011a, p. 480). Further research on accounting and accountability issues in natural disaster contexts may start considering calculations not only for their rational aims but also for their attitude to constitute social relations (Miller, 1994; Bryers, 2011a and 2011b).

This study also demonstrates that an "inversion" in the accountability relationship – *i.e.* with the flooded citizen giving account to municipalities, the ECR and the "Flood Team" – may be necessary when authorities need estimation which they could not assess by themselves. Actually, such an "inversion" can favor the governors' accountability because the usual accountee may personally verify how the accountability process really works, once he/she participates in this process. For this reason, future research on the "social aspects" of accounting in natural disaster recovery may benefit from the contributions of this paper, as well as researches in different contexts where citizens are engaged in calculative practices. Accounting – quite surprisingly – may act as a tool to overcome some of the ethical "limits of accountability" (Messner, 2009) that critical accounting research recently highlighted^{ix}. Actually, accounting whether based on an active participation of all the actors of the accountability relationships, may avoid that the rendering of an account might undermine responsibility. Though this paper did not directly discuss any ethical dimension of accountability, the results gained within the context of a natural disaster recovery may favor future researches in such direction. The consideration of peculiar settings where accountability relationships are not fixed, and different "players" can be involved in accounting practices, appears to be inspiring.

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Appendix

Table 1. Frequency, consequences and estimated damages of flood events in the World (1990-2011).

Continent	Number	Deaths	People affected	Estimated Damages US\$ (,000)
America	557	40,997	47,300,376	78,088,080
Europe	397	2,182	8,197,577	91,164,364
Australia and New Zealand	52	43,179	55,497,953	169,252,444
Asia	1,166	100,230	2,611,039,692	309,077,739
Africa	661	16,576	43,232,011	4,885,768
World	2,833	203,164	2,765,267,609	652,468,395

Source: EM-DAT.

Table 2. Frequency, consequences and estimated damages of the top ten flooded countries in Europe, ordered for frequency (1990-2011).

Country	Floods	Deaths	Affected people	Estimated Damages US\$ (,000)
Russia	48	566	2,174,557	2,520,570
Romania	38	419	387,252	1,925,190
France	30	132	61,737	5,528,350
Italy	24	202	81,930	20,473,300
United Kingdom	23	43	382,725	16,153,230
Greece	18	42	14,188	1,203,359
Germany	14	50	536,708	13,653,600
Bulgaria	13	52	13,508	458,000
Hungary	13	10	181,508	881,400
Spain	13	54	12,856	1,152,885
Total Europe	395	2,177	8,197,582	90,342,264

Source: EM-DAT.

Table 3. Subjects and duration of the interviews conducted by the authors, listed for date.

First round of interviews (February-April 2012)		Duration
Populace level	Flooded citizen 1	45'
	Flooded citizen 2	30'
	Flooded citizen 3	60'
	Flooded citizen 4	30'
	Flooded firm 1	30'
	Flooded firm 2	45'
Municipal level	Municipal Mayor 1	60'
	Municipal Mayor 2	60'
Regional Level	Regional officer 1	90'
	Regional officer 2	30'
	Vice ECR	60'

Second round of interview (November 2012-January 2013)		
Populace level	Flooded citizen 5	30'
	Flooded firm 3	60'
	Flooded citizen 6	30'
	Flooded citizen 7	30'
	Flooded citizen 8	45'
	Flooded firm 4	45'
	Flooded firm 5	60'

	Flooded citizen 9	30'
	Flooded citizen 10	30'
Municipal level	Municipal officer 1	60'
	Municipal officer 2	30'
Regional level	Municipal Mayor 3	60'
	Regional officer 3	45'
	Regional officer 4	60'

Table 4. List of open questions submitted to flooded citizens and firms during the interviews

<ul style="list-style-type: none"> - Did you apply for the reimbursement of damage to the Regional government? Did you apply for the advance payment? - How did you hear about the procedure for damage? - Do you think that the procedure was clear? - Do you think the regional guidelines and the municipal support were effectively delivered to the flooded people? Did you find them useful for a proper reimbursement application? - Do you think that this procedure infringed the privacy of your family/business? - Did you experienced any difficulties or problems in make the estimates and complete the format? - Are you aware of people who have received funds or reimbursement without completing the application? - To your knowledge, there were other ways to obtain reimbursement of the damages? - To your knowledge, there were people who decided not to apply for reimbursements? If so, for what reasons? (concern for controls, possibility of “doing by their selves”, to avoid delays) - Did you undergo any control by your municipality or by the customs, excise and tax crimes Guard? In your opinion, were such controls transparent and effective? - Are you aware of people affected by the controls of the municipalities? If so, what kind of controls were made? - Are you aware of other floods in which the management of recovery was better? And worse? - Which forms of “support” to the application for damage reimbursement do you know? - In which ways the Region supported the flooded people in the accounting for damage? Do you believe there were other forms of relief available? - In which ways the Municipality supported the flood victims in the accounting procedure? Do you believe other aids or procedures were possible? - Did the regional guidelines (report, FAQ, site) facilitate the accounting for damages you were required to implement? - Do you think that the Region and the municipalities worked in close collaboration? - While fulfilling the application did you ask for help from relatives, friends or neighbours? - Did you have the opportunity to help someone? - In your town, which is the common opinion about the way the Region handled the recovery? Do you have the same opinion? - Do you think that the reimbursement procedure helped or hindered your estimation of the damage? - After this tragedy, do you believe that the relationship with your municipality and the regional government became stronger or weaker? - Do you think that the controls run by municipalities contributed to increase the efficiency and the equity of the recovery process? - Do you think that the accounting for damage procedure enhanced any kind of collaboration among the flood victims? Or did it hinder such collaboration? - Do you perceive that a sort of dialogue arose between the flood victims and the municipal offices? - How do you evaluate the final document released by the Region on the results of the recovery procedure (“Veneto: the great flood”)? - Did you find the information was sufficient for the application? Was some information missing?

Table 5. List of open questions to mayors and officers of the municipalities and the regional government during the interviews.

<ul style="list-style-type: none"> - How many requests for reimbursement did the Municipality receive? - Were estimates and accounting the only way to get a refund for the flood damages? - What role did the municipality play in the process of reconstruction and compensation for damage? - Which tasks did the Regional government delegate to the municipalities? - Which activities did the municipality accomplish for the region? Data collection? Data processing? Controls? - Which activities did the municipality realize for flooded people? Which ones were explicitly requested by the Region and which ones were provided for individual initiative of the municipality? - Was there any change to the procedures? If so how did you communicate that? - In your opinion, did the region considered the municipality a partner in the flood emergency?
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Table 6. Publicly available sources and non-publicly available sources collected during the interviews

Publicly available sources

Website of the Extraordinary Commissioner for the Reconstruction

“Veneto alluvionato” (“Flooded Veneto” – www.venetoalluvionato.it).

Decrees of the Extraordinary Commissioner for the Reconstruction

- No. 1, 4th January 2010: “Emergency caused by the events, from October 31st to November 2nd 2010, which hit the Veneto Region. Intervention plan: priority order of compensations, as stated by art. 1, c. 3, of OPCT 3906/2010”.
- No. 22, 5th July 2011: “Statement of funds to be allocated for the damages suffered by citizens and firms, according to Article 10, paragraph 1-bis, letter a) of OPCM no. 3906. Allocation of additional financial resources to citizens and firms. Criteria for the determination and quantification of the percentage of eligible contributions according to Articles 4 and 5 of OPCM no. 3906 and its amendment and additions”.

Publications of the ECR

- “Veneto ferito” (“Injured Veneto”).
- “Alluvione che fare” (“Flood: what to do”): Guidelines released by the Flood Team in form of FAQ to explain the damage reimbursement procedure.
- “Veneto. La grande alluvione”(“Veneto. The great flood”): The final document released by the ECR at the end of the emergency phase. It was the results of the recovery process and the reimbursement procedures were disclosed.

ECR Press Releases

- No. 1965, 2nd November 2010: “Sense of community to enact the relief”.
- No. 1980, 3rd November 2010: “We will write to our parliamentarians. The Veneto Region needs funds for the damages it suffered”.
- No. 1984, 4th November 2010: “More attention to the tragedy of Veneto Region”.
- No. 2052, 15th November 2010: “Nomination of Extraordinary Commissioner for the Reconstruction: ‘Be quick, with transparency’”.
- No. 2169, 29th November 2010: “Application forms, refunds for damages and mayors’ tasks”.
- No. 166, 1st February 2011: “Controls over public funds for flooded people: agreement between Veneto Region and customs, excise and tax crimes guard. Unique model in Italy”.

Newspapers articles

- Giornale di Vicenza, “ECR: I will give mayors the money”, May 12, 2010.
- Giornale di Vicenza, “Tajani: from EC 25 million euros”, November 13, 2010.
- Giornale di Vicenza, “Within Christmas deposits in advance for families and firms”, November 19, 2010.
- Giornale di Vicenza, “«I would like less suspects»: interview with Zaia” December 19, 2010.
- L’Arena, “Reimbursement, but not for everyone”, January 5, 2011.
- L’Arena, “Scrap cars and fridges: experts count for damages”, January 22, 2011.
- Giornale di Vicenza, “Flood: European inspectors check the expenses of Vicenza”, November 9, 2012.

* * *

Non-publicly available primary sources

(These sources were kindly provided by citizens and firms hit by the flood and by officers involved in the recovery process. The list is not exhaustive)

- (Informal) calculations made by citizens and firms to fill the accounting forms established by the ECR to have the right to apply for damage refunds.
- Application forms released by the Flood Team and filled by citizens and firms for the reimbursement request.
- Lists of the damages presented to the municipality by citizens (excel format).
- Lists of damages presented to the municipality by firms (excel format).
- Lists of the first emergency actions by the Municipality of [...].
- Lists of the inspections by municipal experts to flooded citizens and firms.
- Flood reports prepared by the Municipality of [...] containing the list of flooded families and firms, the institutions engaged in the recovery, the help provided by volunteers.
- Report by the Mayor of the Municipality of [...] containing the detailed description of the flood; the policies for the emergency; the strategies for the reconstruction; the informal balance sheet of the flood; the financial aids provided to the Municipality.
- Report by the “Flood Office” of the Municipality of [...] containing the list of the activities run by the municipality officers during the first days after the flood and the list of the major “critical issues”.

- Memorandum stated by the “Comitato di aiuto alle persone e famiglie alluvionate presso il Comune di [...]” (Committee for help to flooded people and families).
- List of policies for the distribution of financial aids to flooded people by the municipality of [...].
- Alerts to populations given by the municipalities of [...].
- Resolutions of the bodies of the municipality of [...] describing the emergency intervention policies.

Table 7. Accounting practices during the emergency phase.

<i>Dates</i>	<i>Recovery process phases</i>	<i>Accounting practices</i>
2 nd November 2010	Regional Government of Veneto declared the state of crisis.	
5 th November 2010	National Government declared the state of emergency in Veneto and delegated to the Regional government the whole recovery.	Delegation of duties
13 th November 2010	The task force “Flood Team” was created and its chair (ECR) nominated. Initial funds of € 300 million were allocated by the National Government. An extraordinary accounting procedure to estimate damages and reconstruction expenses was arranged by the Team and assigned to flooded families and firms.	Creation of accounting for damage procedure
20 th November 2010	Municipalities had the duty to report an initial rough estimation of damages and reconstruction expenses.	Rough estimations
26 th November 2010	Release of guidelines “ <i>Alluvione che fare</i> ” to support citizens and firms in accomplish the damages calculations.	Presentation of the accounting procedure
28 th November 2010	Creation of the official website for the Veneto flood recovery to reinforce the Regional support.	Team’s support for the accounting procedure
6 th December 2010	First deadline for the submission of reimbursement request to obtain a deposit in advance.	Preparation of the formats and calculation of damages
17 th December 2010	Provision to flooded families and firms of € 218 million of deposits.	Allocation of the deposits
10 th February 2011	Second (and ultimate) deadline for the submission of the reimbursement request.	Budget preparation and invoices collection to account for reconstruction works and lost goods
March 2011- March 2012	Overall controls on the consistence of each request to the criteria provided by the Team. In depth random controls by the customs, excise and tax crimes Guard.	Controls on budgets and invoices
30 th August 2011	Regional Government of Veneto declared the end of state of crisis.	Collection of information on damages for the final accountability of the recovery

Table 8. Main topics highlighted by the ECR in the report “Veneto Alluvionato” (“Flooded Veneto Region”).

<i>Topics</i>	<i>Description</i>
Damages	Accounts of the 426,000,000 € requested by 262 municipalities affected by the flood. The damages suffered by families, firms, and for public operas are reported for each municipality. The report also emphasizes the consequences for firms in terms of competitiveness and the time needed to rebuild their business.

Donations	Goods provided to flooded people. These are the goods the Civil Defense gave to flooded people, according to what the municipalities signaled.
Contributions	Contributions provided by public institutions, including the Italian government, private entities, and families. For donations more than 2,000 €, a full disclosure was provided.
Resource allotment	Details about the resource allocation: families received 87,702,072.50 €; firms received; 210,750,000.00 € were provided for the public works and 8,647,392.18 € was allotted for other emergency expenses. The allocations were detailed for each municipality.
Construction sites	Highlights that 117 firms, most of them Italian, were engaged in efforts related to the hydraulic safety of the territory and realization of new public works. A detail of the construction sites with works in progress or already finished also was provided.
Big reconstruction public works	Details of the river basin millworks and how they will reduce hydraulic risks in Verona, Vicenza, and Padua provinces.

Table 9. The screen of the software dedicated to the “accounting for flood”.

COMMISSARIO DELEGATO
PER IL SUPERAMENTO DELL'EMERGENZA DERIVANTE DAGLI EVENTI ALLUVIONALI
CHE HANNO COLPITO IL TERRITORIO DELLA REGIONE VENETO
NEI GIORNI DAL 31 OTTOBRE AL 2 NOVEMBRE 2010
Ordinanza del Presidente del Consiglio dei Ministri n. 3906 del 13/11/2010

REGIONE DEL VENETO

Censimento danni ai sensi dell'art. 1 - comma 3 della OPCM n. 3906/2010

Home Privati e Imprese Int. Somma Urgenza Int. Urgenti/Indifferibili Ore Straordinarie Spese Prima Emergenza Riepilogo

utente: S47-comune
S47 COMUNE - Comune di MONTEFORTE D'ALPONE (VR)

Dati di riepilogo

1) Bilancio risorse assegnate all'Ente

Descrizione	Importo assegnabile (€)	Importo da impegnare (€)	Importo liquidato (€)
O.C. n. 22/2011	14003554.40	5927326.31	0.00
O.C. n. 9/2010	0.00	0.00	8740019.40
O.C. n. 29/2011	336754.60	336754.60	0.00
Totale	14340309.00	6264080.91	8740019.40

2) Altri dati

Numero di istanze ricevute:

Utilizzo delle risorse assegnate

a) per spese/opere pubbliche

Tipologia	Numero Istanze	Totale Segnalato (€)
Spese di Prima Emergenza	61	302156.64
Lavoro Straordinario	24	34597.94
Interventi di Somma Urgenza	6	364358.43
Interventi Urgenti e Indifferibili	15	10735000.00

b) per privati/imprese

Tipologia	Numero Istanze	Contributo massimo ammissibile (€)	Contributo accertato assegnabile (€)	Anticipo Errogato (€)
Privati	759	8126180.29	108665.00	1922035.17
Attività Produttive (escluso comparto agricolo)	146	5193052.30	57544.91	1243949.62
Imprese agricole e zootecniche	25	684319.62	129675.00	127146.83
Totale	930	14003552.21	295884.91	3293131.62

Table 10. Municipal calculative table summarizing the data refinement process for families' damage claim.

	a	b	c = 75% x d	d	e = c - d	f	g = e - f
Family's name	Claimed damages	Documented expenses (invoices)	Documented expenses refundable	Insurance coverage	Actual refund	Advance payment	Final payment
...	3,325.00	0	0	0	0	872.81	-872.81
...	1,872.00	1,147.60	860.72	0	750.00	524.10	225.90
...	79,626.30	69,855.08	52,391.31	0	39,517.72	15,647.14	23,870.58
...
...
...
Total	16,827,446.30	1,522,089.10	1,112,470.30	11,750.00	893,267.30	4,945,503.00	-4,052,236.00

Source: Authors' translation of a table provided by a municipality officer during an interview.

Column a) reports the amount requested with the application for reimbursement; column b) records the amount verified during the overall controls; column c) calculates the refundable damage as the 75% of the actual damages according the Decree no. 3906/2010; column d) checks for any insurance coverage; column e) calculates the actual reimbursement due; column f) considers the provision of a deposit in advance; column g) quantifies the final payment due or to be return as the difference between the actual reimbursement and the deposit.

Table 11. Municipal calculative table summarizing the data refinement process for firms' damage claims.

	a	b	c = 75% x d	d	e = c - d	f	g = e - f
Firm's name	Claimed damages	Documented expenses (invoices)	Documented expenses refundable	Insurance coverage	Actual refund	Advance payment	Final payment
...	479,489.35	0	0	0	0	75,000.00	-75,000.00
...	3,837.10	0	0	0	0	0	0
...	4,817.19	4,014.32	3,010.74	0	3,010.74	1,806.45	1,204.29
...
...
Total	4,118,449.80	283,926.69	201,974.03	0	129,377.13	979,991.00	-850,613.82

Source: Authors' translation of a table provided by a municipality officer during an interview.

Column a) reports the amount requested with the application for reimbursement; column b) records the amount verified during the overall controls; column c) calculates the refundable damage as the 75% of the actual damages according the Decree no. 3906/2010; column d) checks for any insurance coverage; column e) calculates the actual reimbursement due; column f) considers the provision of a deposit in advance; column g) quantifies the final payment due or to be return as the difference between the actual reimbursement and the deposit.

Table 12. The format for the reimbursement request which was filled by flooded citizens and firms.

Mod. 2 - Privati
(Allegato 3 Beni Immobili abitazione principale)

LUOGO DEL COMUNE: **COMUNE DI**

EVENTO ALLUVIONALE DAL 30/10/2010 AL 02/11/2010
Modello richiesta contributo per BENI IMMOBILI REGISTRATI

Identificativo catastale dell'abitazione principale:

Indirizzo e mq:

Che a causa dell'evento l'abitazione principale è stata: distrutta completamente totalmente inagibile di localizzare

Per danni riparabili compilare la seguente tabella

	Specificare i locali danneggiati	Tipo danno subito (descrivere il danno)	Valore economico presunto per la riparazione (Euro)	Eventuali spese già sostenute e documentabili (Euro)
1	Riparimenti			
2	Intonaci			
3	Integgiature			
4	Impianti			
5	Ingressi			
6	Altro (specificare)			

Che venga erogato un contributo a fronte dei danni subiti e quantificati in €.....
(il totale deve essere complessivo di IVA)

Nota:
1 - Allegare, se disponibile, anche materiale fotografico o altro che possa documentare in maniera chiara il danno subito.
2 - Le città interessate per cui viene richiesto il contributo sono state selezionate in conformità alle disposizioni previste dalla normativa urbanistica ed edilizia.

Data: Firma:

Mod. 2 - Privati
(Allegato 3 Beni Mobili non Registrati)

LUOGO DEL COMUNE: **COMUNE DI**

EVENTO ALLUVIONALE DAL 30/10/2010 AL 02/11/2010
Modello richiesta contributo per BENI MOBILI NON REGISTRATI

Beni mobili NON REGISTRATI

Bene mobile	RIPARATO Bene con una crocetta	IRREPARABILE Bene con una crocetta	COSTO
Lavatrice	*	*	€
Frigorifero	*	*	€
Congelatore	*	*	€
Lavastoviglie	*	*	€
Cucina a gas	*	*	€
Stufa	*	*	€
Arredi cucina	*	*	€
Arredi Camera	*	*	€
Televisione	*	*	€
Aspirapolvere/lucidatrice	*	*	€
Ciclomotori	*	*	€
Altro	*	*	€
Altro	*	*	€
Altro	*	*	€

Che venga erogato un contributo a fronte dei danni subiti e quantificati in €.....
(il totale deve essere complessivo di IVA)

Ulteriori informazioni

1 - Allegare, se disponibile, anche materiale fotografico o altro che possa documentare in maniera chiara il danno subito.
2 - Allegare eventuali fatture per la riparazione dei beni indicati.

Data: Firma:

i The decree no. 3906/2010 at §10 stated the provision of national funds:

“1. For the works under this decree, a sum of three hundred million euro is made available by the Ministry of Economy and Finance.

1-bis. The resources referred to in §1 shall be used for:

a. 150 million euro, for the relief program stated by this decree and the reimbursement of expenses incurred by Municipalities involved in the procedure and the Flood Team;

b. 150 million euro, for public interventions of reconstruction by Municipalities or Regional government, aimed at reducing the hydrogeological risk in the Veneto region”.

ii In his speech to the Veneto Regional Council, the 13th of November 2010, the vice-president of the European Commission Antonio Tajani illustrated how to access to the EU Solidarity Fund: “The provision of funds can reach 2.5% of the total documented damage, but a careful estimate is needed, including any direct damage suffered not only by buildings and estates, but also by families, businesses and artistic heritage.” (Giornale di Vicenza, “Tajani: from EC 25 million euros”, November 13, 2010).

iii The website www.informazione.it offers the links to the forms to be filled for the flood occurred in Genoa and other minor town of Liguria in 2011. Equally, the forms for the damages suffered during the flood of Grosseto and other towns of Tuscany in 2012 are downloadable from the website <http://iltirreno.gelocal.it/>. To the authors’ knowledge, although in last decades floods have severely hit Italian territories – e.g. the 1998 flood in Sarno, a town close to Naples, where 160 citizens died (Mazzarella and Diodato, 2002) –, there are no previous contributions on the usage of calculative practices in recovery actions.

iv “The first estimate presented by the 6th of December, allowed to receive the 30% of the total amount in advance. This first estimation could be approximate. No controls were carried out on these first estimates for the provision of the deposit. As a result there were those ones who got a large deposit, since they claimed for a huge damage. In some cases, some of them had to return part of the deposit after the controls on the whole documentation.” (Authors’ interview with “municipal officer 2”].

v “We submitted all the documents, the budget and the invoices together with the filled request format. We did not need any deposit, so we apply at the second deadline. In this way, we could provide every invoice to prove the actual expense for reconstruction works” [“flooded firm 4”].

vi “Today, Johannes Hahn, European Commissioner for Regional Policy, confirmed the Commission’s proposal to allocate € 16.9 million to the Veneto region in Italy to cope with the consequences of the severe rainfalls of October 2010. The grant is being made available through the European Union Solidarity Fund (EUSF). It will contribute towards the costs borne by public authorities in response to the emergency, in particular for restoring essential infrastructure” (European Commission Press Release IP/11/1363, November 17, 2011).

vii A recent Italian disaster recovery must have offered a lesson: The recovery from the tragic earthquake in the Abruzzo region was criticized for being widely affected by corruption and “the Abruzzo regional chancellor delegated to the Environment and Civil Defence has been arrested for supposed favours granted – and resources received – for the post-seism reconstruction programme, together with other persons” (Sargiacomo and Ianni, 2011).

viii Tables 9 and 10 illustrate the information recorded by a municipal office on each requests submitted by families and firms.

ix Actually, after years in which accounting was blamed of limiting the possibilities of accountability (Roberts, 1991; Shearer, 2002), a debate on the “limits of accountability” (Messner, 2009) and the emptiness of mere transparency have recently known growing attention, especially by critical accounting research. Since accountability is not a “perfect machine”, its ethical foundations are questioned (Cooper and Owen, 2007; Messner, 2009; Roberts, 2009; Joannides, 2012; McKernan, 2012), while the glorification of transparency is shifting toward doubts about the risks that transparency may undermine accountability. In line with the moral philosophical work of Butler (2005), the dark side of transparency emerges from an “ethics of narcissus”, or “the manufacture of good appearances through reputation management with no necessary reference to conduct and its actual effect” (Roberts, 2009, p. 967).