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The uncertainties of risk management - A field study on risk management internal audit practices in a Finnish municipality

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Structured Abstract:

Purpose: The paper analyses the implementation of risk management as a tool for internal audit activities, focusing on unexpected effects or uncertainties generated during its application.

Design/methodology/approach: Public and confidential documents as well as semi-structured interviews are analysed through the lens of Actor-Network Theory to identify the effects of risk management devices in a Finnish municipality.

Findings: We found that risk management, rather than reducing uncertainty, itself created unexpected uncertainties that would otherwise not have emerged. These include uncertainties relating to legal aspects of risk management solutions, in particular the issue concerning which types of document are considered legally valid; uncertainties relating to the definition and operationalisation of risk management; and uncertainties relating to the resources available for expanding risk management. More generally, such uncertainties relate to the professional identities and responsibilities of operational managers as defined by the framing devices.

Research limitations/implications: Risks do not "exist" before they are a fact that can be clearly witnessed and agreed upon by most parties; until then they are just a construction, a set of beliefs, which might or might not ever become a fact. Risk management is supposed to reduce uncertainty by following procedures dictated by the framing. However, that very framing generates overflowing and thus emphasises the debated and more or less controversial nature of the manner in which we calculate risks.

Practical implications: Based on the study, we encourage COSO spokespersons, auditors and others involved to engage more thoroughly in the debate concerning whether risk management is, for instance, too bureaucratic and time consuming for operational managers and other organisational actors.

Originality/value: The paper offers three contributions to the extant literature: first, it shows how risk management itself produces uncertainties. Secondly, it shows how internal auditors can assume a central role in the risk management system. Thirdly, it develops Callon's framing/overflowing framework with the notion that multiple frames are linked and create unexpected dynamics, and applies it to the study on the effects of risk management tools in an internal audit context. It shows how, despite recurring attempts to refine risk management, further uncertainties are continuously produced, thus providing an empirical illustration of how reframing and overflowing intertwine in a continual process.

Keywords: risk management, auditing, internal control, Actor-Network Theory, public sector

Article classification: Research paper

1. Introduction

In the wake of corporate scandals and failures that have occurred since the 1990s, frameworks and practices for managing organisational risks have proliferated in both the private and public sectors, while their scope has widened from the management of financial risks to the risk management of everything (Power, 2004). These significant developments have also inspired a wealth of research in various fields. For instance, audit scholars have illustrated how internal auditors have become to be portrayed as experts in risk management (e.g. Spira & Page, 2003; Power, 2007; Sarens et al., 2009) and how risk-oriented audit practices have been developed as a response to new demands (Curtis & Turley, 2007; Knechel, 2007; Robson et al., 2007). Management accounting researchers have lately focused especially on the broad notion of Enterprise Risk Management (ERM), tracing the discourses and logics underlying its development (Power, 2004; 2007) or analysing various factors and processes that relate to the extent of its implementation (Liebenberg & Hoyt, 2003; Beasley et al., 2009; Woods, 2009; Arena et al., 2010).

There are also more critical analytical studies that point to various problems regarding the effects of risk management; for example, that it might generate a false sense of being in control (Power, 2009) or that the transition to business risk auditing might make auditing an even riskier activity (Jeppesen, 2006). Yet another suggested problematic effect of risk management is that:

> "[a]s compliance with more or less standardized governance models comes to dominate increasingly the design of risk management systems, it may well be that the ability of these systems to manage the full range of uncertainties that organizations face is diminished." (Miller et al., 2008, p. 944)

Despite such concerns, the ability of risk management to capture organisational uncertainties has been empirically examined in only a few field studies (e.g. Mikes, 2011). The purpose of the present paper is to address this gap in the literature by examining the application of risk management as a tool for internal audit activities. In particular, we seek to answer the following question: What types of effect do risk management systems generate while being implemented? Mindful of the critical arguments posited in the extant literature, we are especially interested in any unexpected effects that might be created due to risk management itself. Here we are not just referring to the narrow notion of 'the risks of risk management' (Jeppesen, 2006) but are rather following the conceptualisations of Frank Knight (1921) and Callon et al. (2009). In his seminal work, Knight pointed out that the calculation of risk requires the existence of at least a statistically known probability distribution and that, if this is not possible, only uncertainty remains. In a similar vein, Callon et al. (2009, p. 19) note that risk is simply a subgroup of the broader term uncertainty and, by definition, that which has been made the object of management attention and possible intervention. Consequently, instead of referring to the risks of risk management, we should rather conceptualise unexpected effects as the *uncertainties* of risk management. In this paper, we develop an approach to more systematically explore such uncertainties within an organisational context.
In so doing, we draw upon a theoretical apparatus based on Actor-Network Theory's (ANT) concepts of framing and overflowing (Callon, 1998a and 1998b; Callon et al., 2009) to enable an

exploration of the effects performed by risk management and its multiple inscription devices, or tools.[1] Callon's conceptual framework is useful for this purpose as it enables us to consider the diversity and individualisation of risk management, a practice which is heterogeneous to such an extent that it might be addressed in the plural, as *risk managements* (Mikes, 2011). Moreover, ANT sensitises us to the possibility that non-human actors, such as risk reports and risk audit models, can play a notable role in constructing and (de)stabilising organisational activities, and thus enables us to analyse risk management as a socio-technical network comprising both humans and technologies. Finally, Callon's framework allows us to examine how actors' identities change during dynamic processes, and even to cast a critical eye over actors aiming to impose their own agendas on others.

We apply our analytical framework to risk auditing and internal auditors' efforts to develop comprehensive risk management solutions in a Finnish municipality (henceforth "Case Municipality"). Case Municipality, with its numerous dispersed departments that provide various services, forms a case in which risk management has been translated and developed with the aim to reduce or eliminate uncertainty. However, in several and recurrent episodes, the risk management frame has become controversial and contested by various actors. It is exactly such episodes that enable a broader exploration of the uncertainties of risk management in terms of overflowing:

> "Controversies make possible the exploration of what we propose to call overflows engendered by the development of science and techniques. Overflows are inseparably technical and social, and they give rise to unexpected problems by giving prominence to unforeseen effects. All, specialists included, think they have clearly defined the parameters of the proposed solutions, reckon they have established sound knowledge and know-how, and are convinced they have clearly identified the groups concerned and their expectations. And then disconcerting events occur." (Callon et al., 2009, p. 28)

In other words, through Callon's theoretical lens, we can regard risk management as a socio-technical network and consider the eventuality that such a network might overflow; that is, it might give rise to unforeseen effects in its operations. Callon et al. (2009) predicate that specialists, such as Case Municipality's internal auditors, frequently assume that they have full knowledge when designing a risk management solution, and that they have properly identified the relevant groups of actors and their expectations concerning the risk management. Our case is an exact illustration of how such assumptions can result in disappointment when unexpected events occur and further uncertainties (overflows) emerge. The paper thus offers three contributions to the extant literature: first, it shows how uncertainties are produced due to risk management itself; second, it shows how internal auditors assume an active and central role in the development and operationalization of risk management; third, it develops Callon's framing/overflowing framework with the notion that multiple frames are linked and create unexpected dynamics, and illustrates its applicability to the study on the effects of risk management tools in an internal audit context. In particular it shows

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[1] The terms inscription devices, tools and framing devices are interchangeably employed.

how, despite recurring attempts of refining (reframing) risk management, further uncertainties are continuously produced, thus providing an empirical illustration of how reframing and overflowing intertwine in a continual process. The resulting implication is that overflowing perpetually occurs and, thus, practices are only provisionally stabilised.

The rest of the paper is organised as follows. The second section reviews prior research and subsequently develops the ANT perspective into risk management, which serves as the analytical framework of the research. The third section presents the methodology and methods of the research. The fourth section provides a brief description of the empirical research setting as well as an analysis of the uncertainties generated by risk management in Case Municipality. The final section discusses the research findings and draws conclusions.

2. Researching the effects of risk management

2.1 The extant literature

Since the early 1990s, risk management has gained increasing attention in both organisational and audit practice and research. This phenomenon can largely be credited to two interrelated phenomena: first, wider societal developments such as the emergence of the "risk society" (Beck, 1992) have increased societal demands for organisations to demonstrate accountability and proper internal control, thus increasing the importance of accounting and auditing and revitalising their roles as risk management functions. This reflects how risk and accountability have been constructed as a problem, with auditing being regarded as part of the solution. Secondly, the corporate failures and scandals that occurred in the UK and the US in the early 2000s, with ramifications felt all over the industrialised world, have raised suspicions that auditing alone is not sufficient to prevent fraud and needs to be complemented by effective corporate governance, internal control and risk management within organisations. These developments have served as the underlying motivation for the plethora of guidelines and regulatory frameworks issued by authoritative bodies in the US, the UK and the EU, including the Cadbury Code (Committee on the Financial Aspects of Corporate Governance, 1992); the Criteria of Control Framework, (Canadian Institute of Chartered Accountants, 1995); the Turnbull recommendations (ICAEW, 1999; Financial Reporting Council, 2005); COSO and COSO-ERM (Committee of Sponsoring Organizations of the Treadway Committee, 1992; 2004); the Sarbanes-Oxley legislation of 2002; and, the EU Directive on Statutory Audit (European Parliament and Council of the European Union, 2006).

The heightened emphasis on risk management as an element of corporate governance has inspired a number of studies that perceive risk management as a neutral system fulfilling a particular organisational function, with systemic differences occurring as a result of organisational or institutional factors. Consequently, one stream of such studies is based on purely normative perceptions on how to conduct risk management and what to do better than before (e.g. Taleb, Goldstein & Spitznagel, 2009). Another stream is, at least implicitly, predicated upon contingency theory and explores factors that cause differences in the implementation of ERM systems (Kleffner, Lee and McGannon, 2003; Beasley et al., 2005; Woods, 2009), while a third stream has investigated the significance of risk management systems in the context of organisational strategy (Liebenberg

& Hoyt, 2003), regulatory compliance (Arnold et al., in press) and financial performance (Nocco & Stulz, 2006; Gordon, Loeb & Tseng, 2009). Common to these rather functionalist perspectives is that, in aiming for an objective approach, they consider risk management systems develop in isolation from the interests and beliefs of social actors and their relations, and then to be almost blind to the effects that arise from such relations.

Other, more constructivist studies in the domain of risk management that all problematise such a perspective include the works of Collier and Berry (2002), Spira and Page (2003), Power (2004; 2007; 2009), Mikes (2008; 2009; 2011), Knechel (2007), Robson et al. (2007), Miller et al. (2008) and Arena et al. (2010). Spira and Page (2003), for example, suggest that the alignment of risk management with internal control has provided internal auditors with opportunities to gain organisational power and influence as risk management experts. Also, within the field of auditing, Knechel (2007) discusses, in the same manner as Robson et al. (2007), how external auditors have moved to the practices of risk management and the types of obstacle they faced in so doing. Knechel (2007) suggests that the implementation of business risk auditing has generated uncertainties that relate to, for instance, the timing and staffing of audits, the interpretation of business risk evidence and the implications for the auditors' careers. In turn, Robson et al. (2007) illuminate how business risk audit concepts and auditor duties can generate internal tensions between various strata of the accounting profession.

Power's influential pieces of work on the construction of ERM (Power, 2004; 2007) have increased our understanding on how ERM has emerged as a result of the global circulation of managerial ideals and expanded the realm of risk management from narrowly defined subcategories, or silos, to every aspect of organisational life, and how it has persisted despite practitioner criticisms on the extensive documentation and bureaucratic exercises involved. In particular, when discussing the latter issues, Power (2007) points to the defensiveness of risk management and the increased legalisation of organisations, both of which he regards as relating to the "logic of auditability"; that is, "a logic in which the demand for things to be auditable and for things to be seen to be auditable are almost identical" (Power, 1996, p. 312). As a type of neo-institutional argument for decoupling, Power (2007) subsequently posits that, despite their bureaucratising effects, mechanistic approaches particularly survive because they are easily auditable representations of risk management, and therefore provide organisations with a weapon with which to defend themselves against stakeholders or in a court of law.

In a more critical vein, Power (2009) claims that the ERM focus on rule-based compliance and the production of an audit trail has generated a superficial conceptual system that might at worst provide only an illusory and perhaps a dangerous sense of security, resulting in the costly "risk management of nothing" (Power, 2009, p. 853). Such concerns are matched by Miller et al. (2008), who point out that much of risk management work relates to various hybrid entities, which are not within the reach of rigid standardised frameworks such as ERM. Their argument is that too much attention has been paid to the organisational form of the management of uncertainty, and that uncertainty is also associated with cross-organisational elements conceptualised as 'hybrid practices, processes and expertises' (ibid., p. 944). Miller et al. (2008) thus seem to suggest that governance models tend to ignore that uncertainty is an issue which relates to an organisation's linkages to other firms and other groups of professionals and experts. In other words, the present governance approach to risk management is producing a type of 'blind spot' that might leave particular uncertainties unmanaged.

The claims presented by Power (2009) and Miller et al. (2008) have only to some extent been empirically confirmed by a study which found notable variations in the extent to which ERM becomes embedded in organisations' decision-making, dependent on risk rationalities, experts and technologies (Arena et al., 2010). In one of the three organisations investigated by Arena et al. (2010), ERM was implemented to comply with parent company orders and operationalised as a one-off box-ticking exercise by an unenthusiastic internal auditor. The result was a complete decoupling of ERM as operational managers did not consider it to add value to existing risk management technologies. However, in the other two cases, ERM became embedded in the organisation to a greater degree, and this heterogeneity of effects prompted Arena et al. (2010) to call for more research on the interactions between people and technologies. In turn, Mikes (2011) has conducted an analysis of how risk experts perform boundary work to define themselves as risk *experts*, resulting in discussion on whether risk management is worthwhile as a practice. Mikes' findings partially lend support to criticisms on risk management, especially in terms of risk management relying so heavily on formalised risk technologies and models. Mikes argues that model-based risk management is only applicable in instances when the probability distributions of uncertainties are known or can be statistically inferred, but cannot be expected to address completely unmeasurable uncertainties. Instead, Mikes suggests that risk management might provide useful information for decision-making if its practices can be developed into risk envisionment that, instead of formal models, relies more on mental models which utilise the experience of non-risk specialists to make informed judgments. Mikes guides future research by saying that much needs to be done to explore the role of risk measurement, which we regard here as risk management more broadly in day-to-day organisational actions, as well as the possibility of including non-risk specialist judgments within the practice. We take up the suggestions of both Mikes (2011) and Arena et al. (2010) by developing an ANT–based approach to explore the effects of implementing risk management technologies in an organisational context.

2.2 An Actor Network Theory perspective on uncertainties of risk management

ANT has informed multiple accounting studies on numerous themes and in a variety of ways, utilising in particular Latour's vocabularisation of the key ideas (Justesen & Mouritsen, 2011). However, in this paper we are more interested in Michel Callon's (1998a; 1998b) engagement with economic sociology and how economic models, such as those on risk management, perform (i.e. participate) in enabling market transactions. Callon's work is applicable to an internal audit context since leading economists (e.g. Frank Knight's seminal writings on risk management) have had a profound influence on modern risk management models such as the COSO framework, which is being developed and applied in numerous organisational contexts and functions, including internal auditing.

To study the performativity of economic models, Callon suggests drawing on the notions of framing and overflowing (Callon, 1998b) that have been further developed in a more recent book, "*Acting in an uncertain world"* (Callon et al., 2009), which focuses explicitly on risk management in a broad sense. In this book, the authors dive into the well-established vocabularies of risk management. As their starting point they indicate that, in current language, notions of risk and uncertainty are being confused by employing them interchangeably and in a very general sense. The problem with such usage is that the concept of risk, among broader uncertainties, in fact denotes cases which become the object of rational calculation; that is, measuring their probabilities and considering possible mitigating actions. Similarly, Miller et al. (2008, p. 944) consider "uncertainty to refer to a wider range of phenomena than risk" and risks as "those forms of uncertainty which have been defined and constituted as risks." As Callon et al. (2009) further argue, the term risk only enables the investigation of those uncertainties that have already become the object of risk management. The failure of such an approach is that the uncertainties generated *due* to risk management do not become the object of exploration: "We know that we do not know, but that is almost all that we know: there is no better definition of uncertainty" (Callon et al., 2009, p. 21).

The definition offered by Callon et al. (2009) very much echoes Knight's (1921) classic categorisation, which distinguishes between three types of uncertainty. The first category comprises those uncertainties for which a probability distribution is known, while the second category contains uncertainties for which such a distribution is not directly known but can be statistically inferred. The third category comprises so-called Knightian uncertainties, for which no probabilities can be calculated as their distributions are completely unknown. In Callon et al.'s (2009) terminology, risks correspond to Knight's first- and second-category uncertainties, as these can be measured and acted upon, while their definition of uncertainties corresponds to Knightian uncertainties as these cannot be measured and consequently managed. It is only in ontological matters that the perspective of Callon et al. (2009) differs from that of Knight who, as an economist, held a realist perspective on uncertainties as existing independently of human consciousness. Conversely, Callon et al. (2009) consider uncertainties to be constructed, albeit not purely socially but by a mix of human and non-human actors, such as the tools created to enable risk management transactions. The point here is that the defined risks constitute the reality upon which actors tend to act, but this reality does not exist independently of the manner in which it is uncovered.

Callon defines the concept of a frame, which he borrowed from Goffman (1974), as follows:

> "The frame establishes a boundary within which interactions - the significance and content of which are self-evident to the protagonists - take place more or less independently of their surrounding context." (Callon, 1998b, p. 249)

Invoking Goffman's theatrical metaphor, Callon argues that all tacit agreements between participants in a theatre performance (i.e. audience; actors; assisting personnel) would swiftly fall apart if they were not contained within a suitable physical frame formed by the theatre building, lighting, seats, doors, walls, movements of the curtain, and so forth. More generally, the framing, or organisation, of interactions requires physical technologies, calculative devices or inscriptions that define the involved actors' identities. According to Callon (1998b) identities comprise actors' expectations, interests and responsibilities; in other words, the role that the actors are going to play. In accordance with Callon's definition, a practice such as risk management presupposes that a frame has been established that defines risk management participants' identities, roles and related responsibilities. As such, the frame accords meaning to relevant (risk) information, showing how reality is a creation rather than something that objectively exists "out there". This does not exclude the possibility that particular identified risks might become real, although we can only know for sure after the fact, and that some unexpected events might also occur.

Written texts (Callon, 1991), such as risk management guidelines and reports, are explicitly mentioned as inscriptions that can act as framing devices. These written inscriptions often contain knowledge claims (Latour, 1987) that can be employed by actors when attempting to construct a particular frame in their efforts to enrol other actors into accepting the frame. When a frame is more or less uncontested by other actors, it can be termed pure. In turn, purification occurs when experts, such as consultants and auditors, confirm the relevance of particular framings.[2] Organisational actors promoting and imposing the implementation of the COSO framework on others, for instance, might justify its superiority by appealing to the fact that it is based on the work of a committee comprising risk management experts. Including such a device within the frame of risk management might thus increase the perceived purity of the frame *and* its proponents in the eyes of participants in the interactions, as well as those outside the frame. The outside world is significant as Callon (1998b) emphasises that interactions occurring within the frame are by no means disconnected from it. In contrast, the framing devices themselves constitute linkages to the surrounding environment.

Because framing devices are connected to the outside world, Callon (1998b) claims that framing is always incomplete and susceptible to overflowing. The latter concept constitutes Callon's sociological revision of the economic term externality, and implies in a wide sense the harm or benefit that accrues to a third party from the framed interactions. From Callon's perspective, overflowing and disorder are the norm, while stability of a frame is a fragile outcome that results from substantial investments in various devices. When overflows occur, those actors, who see them merely as the results of imperfections in the framing process, seek to stabilise the situation and reframe these previously uncontained overflows by investing in more efficient or tried-and-tested framing devices. Thus, for instance, the occurrence of fraud in an organisation might be regarded as resulting from a deficiency in the risk management system, which would then be replaced or complemented with a well-known solution, such as the COSO framework. Callon (1998b) further argues that in processes within which frames are thus reconfigured, the identities of various actors, such as auditors or managers, are necessarily also negotiated and delimited as these individuals are integral to both the frame and the interactions occurring within it. Reframing is (momentarily) successful to the extent that actors, who previously felt that they were impacted or excluded by the

[2] If a frame with its contents and significances is said to be pure, this simply means that the frame imposed on others is *momentarily* uncontested by these others, who can also be regarded as participants in the framed interactions. For a broader explanation of the terms pure and purification, see Christensen and Skærbæk (2010).

framing, subsequently perceive themselves as being acknowledged, provided that the new refinements do not cause other actors to feel impacted or excluded.

The notion of overflowing directs attention to the uncertain and transformative role that accounting and risk management devices can assume in accomplishing reframing, and to the idea that the framing and further stabilising actions just provide "an opening on to other worlds, the constitution of leakage points where overflowing can occur" (Callon, 1998a, p. 18). Thus, we might posit that (re)framing devices establish links to other frames, each with its own significances and contents.[3] In the context of municipal internal auditing, we can easily imagine that a risk management report would be discussed in a political assembly with its own political frame, or that internal auditing would be regulated through a legalistic frame with yet other significances and contents. It is precisely in situations involving multiple frames that matters can become uncertain and overflowing can occur. An example might be the questioning or criticism of municipal internal control rules designed by internal auditors (risk management frame) by a judge within a courtroom (legalistic frame).[4] As a result, the rules might need to be revised to make them more robust against legal critiques; in other words, reframing needs to occur to incorporate the court into the frame of risk management.

It is therefore apparent that framing and overflowing are intertwined, and all efforts to manage risk within a specific frame are bound to overflow as the frame provides an opening for the ingress of environmental complexities. This is similar to, for example, contract incompleteness or the philosophical problem of applying rules; that is, it is inevitable as no script can determine the conditions under which it is applied. In this sense, the term overflowing is a broader and more nuanced concept than its economic equivalent of externality. Another term that relates to overflowing is 'unintended consequences' which is widely employed in accounting studies (e.g. Power, 2003). According to Giddens (1984, p. 14) unintended consequences are "regularly distributed as a by-product of regularized behavior reflexively sustained as such by its participants" (Giddens, 1984, p. 14).[5] In contrast to Giddens, Callon emphasises that overflows are not produced 'regularly' but are the 'norm' (Callon, 1998b, p. 252) and unavoidable. Moreover, overflowing does not just refer to side-effects and resistance, the latter pointing to subjectivism when some actors might resist as they have their own purposes (Rose & Miller, 1992, p. 190). As Skærbæk and Tryggestad (2010, p. 111) point out: "an established (strategic) frame is a condition for the

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[3] This touches upon the idea of boundary objects (Star & Griesemer, 1989; Briers and Chua, 2001). Callon (1999, p. 188) notes that boundary object is simply another term for framing device (or inscription device). Throughout our analysis, which focuses on local developments in Case Municipality, it is clear that risk management, as it travels, becomes something different in various organisations. However, this is not our main interest in the paper.
[4] In this situation, several entities within the court would discuss and test the robustness of the internal control designs, resembling Callon's (1986) and Latour's (1987) notion of 'trials of strength'. Here the proponents or spokespersons of the internal control designs cannot declare themselves winners before the judge declares the designs (rules) to be legally warranted or valid.
[5] Giddens was himself critical of the use of the term by saying that "philosophers have used up a great deal of ink attempting to analyse the nature of intentional activity" (Giddens, 1984, p. 11). This potentially raises a long and difficult discussion on what is intended and what is not. We can also follow Clegg (1989, p. 203), who emphasises that ANT's abandonment of "all a priori distinctions between the natural and social", for instance, the inclusion of technical objects, "undermines Giddens at the root of his subjectivism."

emergence of a concerned group. Such a group is not independent of a (strategic) frame, but is linked with it through the devices that maintain the frame." Thus, overflowing points to the issue that frames might generate uncertainties in a wider sense than merely resistance caused by existing values, and that these uncertainties might prompt reframing in dynamic processes of active transformations rather than the more passive reproductions implied by the unintended consequences approach. Therefore, compared to externalities and the other related concepts presented above, overflowing is a richer and more nuanced concept for understanding what we denote as the uncertainties of risk management.

Regarding the limitations of Callon's framework, ANT has been the object of much heated debate, particularly in organisation studies and economic sociology. Critical researchers such as Whittle and Spicer (2008, p. 6), for instance, find that ANT is "less equipped for pursuing a critical account of organizations" and, consequently, of accounting. We claim that critical management studies are at least to some extent rooted in Marxism and its idea on fixed identities; for instance, that the capitalist will always seek to exploit the worker and the workers will always seek to avoid exploitation. This enables critical researchers to "challenge structures of domination" (Whittle & Spicer, 2008, p. 612). Similarly, researchers such as Teppo Felin and Nicolai J. Foss, who are much influenced by principal-agent theory, are sceptical of ANT and its performativity thesis; for instance, that economic models such as those of risk management, can under particular circumstances become self-fulfilling prophecies (Ferraro, Pfeffer & Sutton, 2009). Principal-agent theory paradoxically has a shared ontology with Marxism in that the agent's identity is stable and characterised by opportunism, and that the principal, at least as claimed, always seeks to prevent opportunism with the help of contractual arrangements. Whereas critical management scholars tend to care for victims of domination (i.e. workers; citizens; employees), principal agency-theorists tend to care for the principal (typically, managers, nations, investors and owners). We claim that ANT is in opposition to these two positions as it considers the identities of actors to be variable and dynamic rather than fixed (Callon, 1998b; Skærbæk & Tryggestad, 2010). However, this position does not exclude the possibility of being critical, it merely allows for an analysis in which the roles of the oppressor and the oppressed, so to speak, are not predetermined but may change during dynamic processes. In this paper, we are potentially critical of calculative agents who can be managers, internal auditors, owners, employees or representatives of various interest organisations, and how they pursue their interests and seek to impose on others their visions and ideas in more or less negotiated frames.

Utilising the conceptualisation of framing to denote proposed risk management solutions and overflowing to indicate the inseparable technical and social problems that inevitably occur as a result of framing, we may pose our research question in theoretical terms as follows: What are the uncertainties performed by risk management and its multiple inscription devices, and how stable a practice is it?

3. Research methodology and methods

3.1 Methods of data collection

ANT-based studies usually concern analysis of long-term historical processes (Millo & MacKenzie, 2009) by reconstructing flows of actions and events that relate to the studied framing and overflowing. In so doing, scholars, especially in the field of management and accounting, usually come to draw on various types of figure, written media and inscription as their main empirical sources (Callon, 1991; Callon, 1998a). The written media collected for this study consist mainly of an extensive number of both publicly available and internal documents that are listed as our primary sources, comprising municipal annual reports, internal audit reports, municipal council meeting minutes, national legislation, municipal regulations, guidelines and White Papers. Of particular interest in our case were the internal audit reports, official records of investigation and court decisions pertaining to two events construed as control failures in Case Municipality. The internal audit reports, which contain detailed descriptions on the internal control environment and its failures in the two cases, were provided for confidential examination by the manager of Case Municipality's Internal Auditing Unit (IAU). The publicly available court documents, obtained on request from the Regional Court archives, contain a summary of the charges presented by the prosecutor, the defendants' responses, witnesses' statements, references to supporting documentary evidence presented in court, and the court's judgement on the case. They enable observation of practice as they relay events that occurred in the courtroom. In addition, we have followed the documentary trail of two regular risk audits concerning different operational units, a construction unit and a social services unit, to gain a broader understanding on the empirical context and other gathered data.

To complement the documentary evidence, information for the research was obtained from semi-structured group and individual interviews with 13 key actors from various levels of Case Municipality (Table 1). The first round of interviews was conducted in 2008-2009, with a second round in 2010. The interviewees were chosen to represent various administrative levels of Case Municipality comprising the internal auditing function, the audit committee, the city manager, operational management and central administration. Five operational managers were considered a representative sample of the 15 operational units of Case Municipality. In addition to individual interviews, group interviews were arranged when suggested by interviewee(s). The ANT approach to field research is based on investigating a phenomenon with a very open mind, without imposing any pre-fixed ideas on the interviewees, and therefore the interview questions (Appendix 1) were formulated very broadly. They were designed to provide perspectives on how the interviewees viewed the development of risk management in the municipality as well as how they think and act in relation to risk management inscriptions and their distributed tasks. The questions were also constructed to uncover potential scepticisms, disagreements or counter actions by participants. To overcome interviewees' potential reluctance to speak freely on confidential issues, especially those relating to the two scandals analysed further below, they and Case Municipality were guaranteed full anonymity. The fulfilment of this promise requires that the description of the case environment is purposefully vague and specific details of the cases cannot be revealed.

Table 1. Information on the interviews conducted for the research.

Interviewee	Time of interview	Duration, minutes
Internal Audit Manager	May 2008	85
Member of Municipal Audit Committee	November 2008	120
Internal Auditor #1	December 2008	90
Group interview: Managers #1, #2 and #3	December 2008	110
Mayor	March 2009	70
Group interview: Internal Audit Manager and Internal Auditor #2	October 2010	60
Internal Auditor # 3	October 2010	55
Manager #4	October 2010	60
Manager #5	October 2010	45
Group interview: Senior Managers #1 and #2 from Central Administration	December 2010	65

All interviews were either audio tape-recorded and transcribed or typed as the interviewee spoke. After each interview, a summary was written of the main contents and, if considered necessary, the interview guide was modified to follow interesting leads that had emerged, either in the interview or in documents obtained on that occasion. Material was collected until it became saturated; that is, when interviewees' answers no longer contained new information.

3.2 Writing up the case description

In writing up the story of risk management in Case Municipality, we first read through the collected documents to establish a broad view of risk management in terms of the related events and developments. Our aim was to discover what kind of risk management solutions were in use, when they had been introduced, who were the main actors promoting them, and what were the parallel national and international developments. We then examined in more detail those documents that contained definitions of risk management and the associated interactions, and listed the key actors involved. These documents were conceptualized as framing devices and further analysed to establish what kind of knowledge claims and justifications were presented for the risk management solutions, and what kind of identities and roles were allocated to the key actors. Moreover, attention was paid to how these actors' roles, as defined by the documents, changed over time when new risk management solutions were introduced. With a shared view established of how risk management framing developed over the period of interest, we continued to find evidence of overflowing, manifested as the harm or hurt experienced by some actor(s) due to risk management. In practice, we looked for actors' expressions of discontent concerning any of the risk management solutions. On finding such expressions, we examined the context in which they were made (multiple frames) and produced a list of uncertainties that we considered these expressions to represent. Finally, to see whether our evidence supported Callon's claims of overflowing being followed by attempts to stabilise the situation through reframing, we analysed the material to locate qualitative cause and effect links between the two scandals and the expansion of risk management in Case Municipality.

In analysing the interview data, our aim was to establish whether the interviewees' statements supported our interpretation of the documentary material. In accordance with the ANT method, we did not formally code the interview data but analysed them in terms of the interviewees' narratives on their life with risk management. In reading the interview transcripts, we sought to understand how the interviewees viewed the development of risk management in Case Municipality, how they considered the scandals to have influenced it, and what kind of feelings they had towards risk management in the present situation. We noted, for instance, that the internal auditors' responses could be characterized as containing the firm belief that risk management could be made almost perfect (stabilized), whereas the operational managers' responses conveyed the idea that risk management was largely an obligation that inhibited "real" work. Although these interviews serve as an auxiliary to the documentary evidence, they are important to the study in hinting at more overflowing brewing under the surface, thus further illustrating the perpetual nature of the process conceptualized by Callon.

3.3 Precautions taken to avoid researcher bias

Much has been written about researcher bias, especially regarding studies where interviews or participant observation are employed as research methods. Miles & Huberman (1994) distinguish two types of researcher bias. Bias A comprises the effects of the researcher on the participant(s), emerging if the researcher disrupts extant social and institutional relationships; participants "switch to an on-stage role" (ibid., p. 265) and may provide answers they believe the researcher wants to hear. Furthermore, they may consider the researcher a nuisance, a spy or an adversary, and begin to boycott their involvement. Bias A can also inhibit the participants. Bias B refers to the effects of the participant(s) on the researcher, who may go native and establish such a close relationship with the informants as to be "co-opted into [their] perceptions and explanations" (ibid., p. 264). Bias B may also involve so-called elite bias, giving more weight to informants who are more eloquent or higher up the hierarchy. Miles & Huberman's (1994) suggestions on how to reduce both types of bias comprise a variety of tactics, of which we implement the following (the first and second to reduce bias A, thereafter bias B). First, the study was conducted over a fairly long period of time (starting in 2008), which for instance enabled us to interview certain informants several times. Second, we made it clear to the interviewees that our research was not commissioned by a third party but conducted solely for academic interest, aiming to produce a scientific journal article. In this context, we also stressed our commitment to maintaining the anonymity of all the interviewees and the municipality. We believe these measures enabled informants to talk to us more openly and without fear of repercussion. Third, moving on to Bias B, we eliminated the risk of researchers going native as our primary data comprise written documents and hence no participant observation. Moreover, one of the authors is from a country other than Finland and had no preconceptions about the story of risk management in Case Municipality. Fourth, we looked to avoid elite bias by selecting a sample of interviewees from various levels of the municipal management. In addition, we were not formerly acquainted with any of the interviewees, who we might otherwise have considered more reliable. Fifth, as Latour (2005, p. 137) says: "A good text should trigger in a good reader this reaction: Please, more details, I want more details." Adhering to this advice, when the interviewees talked for instance about the court cases, we looked to gather as much detail as possible, which could then be cross-validated against the documents and other interviewees' statements. We sought to provide as many of these (factual) details as possible, so that an explanation could emerge from our description. Finally, we made a conscious effort to discuss our interpretations of the empirical material using Callon's concepts, while also trying to determine if the material actually supported his predictions.

4. The uncertainties of municipal risk management

Following the ideas of Callon et al. (2009) concerning 'acting in an uncertain world', we begin this section with a chronology of the key events to provide the reader with a concise view of how the study unfolded. This summary is followed by a prologue, which describes and characterises the initial processes of constructing risk management solutions up to 2002 when they first become controversial. Subsequently, we present our long-term exploration from 2002–2010. We examine two different situations of controversy where risk management solutions occupied a central position, thus analysing the uncertainties generated by risk management. We conclude the analysis with an epilogue focusing on the current status.

4.1 Chronology of events and actions

Case Municipality is located in Southern Finland and is, by Finnish standards, large; that is, having a population in excess of 80,000. A streamlined organisation chart of its administrative structure is provided in Appendix 2. Case Municipality's Internal Auditing Unit (IAU) comprises the audit manager and several internal auditors, each of whom has been designated a specific branch of municipal services (e.g. social services; information systems; public enterprises). The IAU conducts audits and assessments in accordance with an annual plan, and produces 25-30 reports each year, in addition to which it produces guidelines, delivers training and assists the external auditors. The IAU has had a prominent role in the development of risk management in Case Municipality, especially in the 2000s, in the aftermath of two scandals involving fraud and falsification of accounts. In what follows we will present a brief chronological account of these events and the parallel actions related to developing risk management (Fig. 1).

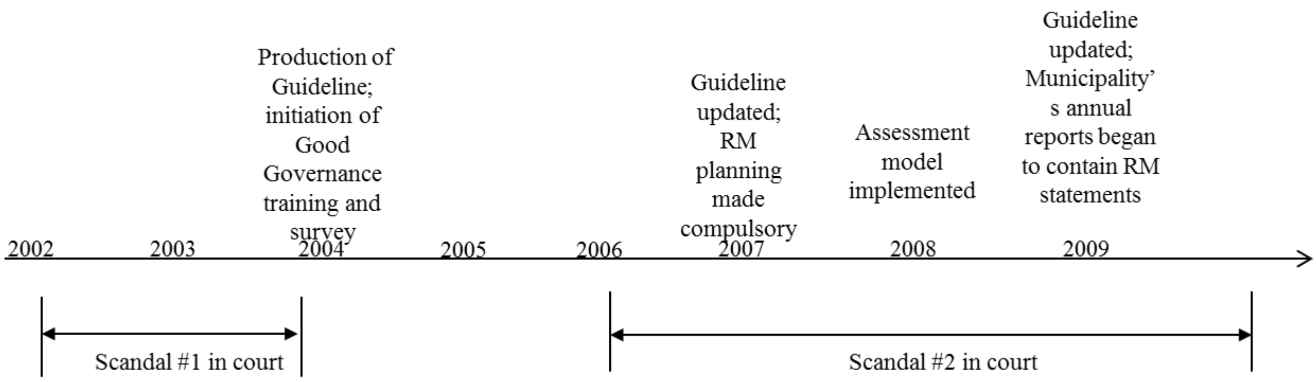

Fig. 1. Timeline of events

Resonant of other Finnish municipalities, the history of risk management in Case Municipality dates back to the mid-1980s when the liberalisation of public sector insurance policies caused an interest in active management of security risks (Enberg, 2002). During the fifteen years that followed, the practice of risk management gradually grew as various national and local organizations promoted it and municipal bodies' responsibilities for risk management were regulated. Overall, things remained fairly stabilised until 2002, when Case Municipality was shaken by a public scandal involving a serious case of fraud. A municipal unit's secretary had on numerous occasions embezzled municipal monies without her superior, Director X, noticing it. These events were made visible by the secretary's co-workers who reported her suspicious behaviour, and police and IAU investigations were begun. The case was subsequently heard in a Regional Court where the secretary was charged with fraud and falsification, and Director X was charged with violation of public office, in particular of neglecting his duty to control an employee's actions. After a hearing involving all the parties concerned and witnesses, including representatives of the IAU, in 2004 the Regional Court found the secretary and Director X guilty as charged.

During the same year as the Regional Court's verdict was given, the IAU produced the COSO-based Guidelines on Internal Control and Good Governance (henceforth "the Guideline"), the contents of which comprised the description of Case Municipality's risk management responsibilities, procedures and systems as well as sections describing internal control components relating to, for instance, bookkeeping, IT security and personnel. In an effort to ensure operational managers' awareness of the Guideline and to increase the likelihood that they would read it, the IAU also began to arrange annual training sessions for operational managers and senior officials, and to administer a biennial survey relating to the contents of the Guideline.

Only two years later, in 2006, a second scandal emerged. This involved Case Municipality's Secondary Education Institute (SEI) which had established a Russian subsidiary in 2002. Its managing director (Director Y) had, among other things, sold on municipal machinery and maintained a black money account; his superior was aware but did not interfere. The IAU estimated that the extent of the activities amounted to approximately one million euros, a considerable amount of money in relation to the size of Case Municipality. In the ensuing trial that ran from 2006 to 2010, Director Y was found guilty of fraud. His superior, Director Z, an operational manager with risk management obligations, was found guilty of a violation of public office as he had neglected to monitor Director Y's activities, regularly inspect the Russian subsidiary's accounting documentation, and take appropriate measures after discovering the existence of the unofficial accounts.

While the trial was proceeding, the IAU had further developed risk management in the municipality, updating the Guideline (in 2007 and 2009) and implementing the new, COSO-based Good Governance Assessment Model [6] to supplement its regular compliance audits (2008). The IAU began employing the model to conduct internal control and risk management assessments of each operational unit once per election period (i.e. every four years). In addition, all units were

[6] The Assessment Model is actually a derivative of the COSO-based framework that was developed for central government agencies by the Government Controller in 2005. The IAU adapted the framework further to better suit the municipal context.

required to commence self-assessment, completing the same assessment model form once a year and sending it to the IAU for comments. Furthermore, in 2007, the municipal regulations committee, of which the IAU Manager was a member, amended the Municipal Enterprise Regulation so that risk management planning became compulsory for municipal units. In a coinciding national development, in 2009 government regulations made internal control and risk management assurance statements compulsory in municipal annual reports, and the IAU became responsible for formulating these statements in Case Municipality.

The above brief description of events and actions illustrates that an abundance of inscriptions, such as legislative documents and guidelines, as well as inscription devices, such as assessment models and survey questionnaires have been developed over time as national and, especially, local actors have attempted to promote and stabilise the frame of risk management. In the account that follows, we do not attempt to provide an exhaustive analysis of each device but focus on the effects of risk management, illustrating how inevitable incompleteness of the framing has resulted in controversies and attempts to reframe risk management with the help of ever more tools and inscriptions.

4.2 Prologue: the construction of risk management in Case Municipality up to 2002

An early inscription relating to the framing of risk management is a report prepared by a working group to chart the state of risk management (Case Municipality, 1986). In their report, the working group problematised the current state of risk management by noting that no comprehensive, systematic risk assessments had been conducted and therefore Case Municipality might be unaware of major risks that, if realised, might threaten the continuity of its operations. This particular report can be considered a significant inscription as it was the first to identify Case Municipality as an actor that was expected to create a space within which risk management interactions could occur in an organised fashion (Vilpo, 2000). In particular, the Municipal Board was defined as the major actor which should initiate improvements, and a yet-to-be-established permanent working group was placed in the role of coordinator of risk management activities. Such a proactive approach to the prevention and minimisation of personnel and property risks was justified with expected economic benefits: “Successful risk management will reduce total costs” (Case Municipality, 1986, p. 5). This persuasive knowledge claim is supported in the document with an economic cost-benefit figure depicting how total costs are lowest at the point where risk management is at its optimum level; that is, the point where the damage cost curve intersects with the prevention cost curve. The working group thus portrayed, both verbally and graphically, systematic risk management as the prime option for any rational actor. Indeed, this inscription proved successful in enrolling the Municipal Board, who subsequently ordered municipal units to begin risk assessments and established the permanent risk management working group, which comprised representatives of the municipal treasury, and the fire and legal departments.

After the 1986 working group report, traces of risk management in Case Municipality are less visible until 1994, when a second key inscription emerged in the form of a general letter published by the municipalities’ representative body, the Association of Finnish Local and Regional Authorities (AFLRA). In the letter, AFLRA (1994) reported the results of a national risk management survey and raised two major issues: first, municipalities did not have sufficient personnel resources for risk management and, secondly, municipalities lacked officially approved risk management guidelines. AFLRA's recommendation that risks be assessed comprehensively and continuously was justified by the accrual of economic benefits:

> "Sufficient preparation for the costs caused by possible damages enables the continuity of service production on the planned scale even in the event of damages." (ibid., p. 3)

AFLRA's problematisation of the state of municipal risk management coincided with the severe economic depression that troubled Finland in the early 1990s and the simultaneous increase in commercialisation and corporatisation of public services. Both developments concerned also the Ministry of the Interior, especially as "certain municipalities" had provided the subsidiary companies in which they were minority shareholders with collaterals that exceeded the municipalities' economic capacities (Government of Finland, 1994). Such issues were considered by the Ministry when drafting the new Local Government Act (1995), and they are also mentioned in the Act's preamble as grounds for the stipulation that public sector auditors should annually verify that municipalities had conducted risk assessments and had proper risk management procedures in place. Similar pressures for change were also emerging globally as the New Public Management movement proceeded (Hood, 1995; Guthrie et al., 1999; Pollitt & Bouckaert, 2011). The national attention paid to risk management instigated Case Municipality's Finance Department to conduct an internal risk management study (Case Municipality, 1995), which referred to AFLRA's conclusions and recommendations but also made an appeal for risk management based on ethical considerations:

> "[Case Municipality] as a large centre embodies numerous forms of operation, each of which contains some kind of risk…Even though legislation and legal praxis define questions of responsibility, the municipality also has a so called moral responsibility for the safety of its inhabitants and it should actively take action to diminish these risks." (ibid., p. 2).

Thus, this framing device defined Case Municipality not only as a rational and compliant actor but also an ethical one which would receive the benefit of moral satisfaction from taking care of its inhabitants' wellbeing.

As a result of global, national and local problematisation, a decision was taken to increase the visibility of risk management in Case Municipality's organisational structure (Vilpo, 2000). The new Local Government Act of 1995 presented a convenient occasion for such changes as it introduced, among several other things, the formal division of municipal auditing functions into external and internal units, which had not previously existed. This inscription thus served to introduce new actors into Case Municipality as the IAU was established in 1997 and positioned in the organisational hierarchy under the city manager and the Municipal Board.[7]

The identities of both the old and the new municipal actors were defined with the help of another framing device, the Municipal Board Regulation amendment (Case Municipality, 1997), which comprised the division of key duties concerning risk management. According to the regulation, the essence of which has remained more or less unchanged, the city manager is responsible for the appropriate application of internal control and risk management systems in accordance with procedures and practices approved by the Municipal Board. The IAU's responsibilities were not defined in the regulation as it is not a political body; however, they were later included in a Municipal Board meeting memo as being "to systematically assess and develop the municipality's risk management, control systems and administrative processes" (Case Municipality, 1999, p. 29). Thus, we see the IAU emerging as a specialist group, or the calculative centre of the municipality, designated with the task to organise risk management. The foundations for the internal auditors' new mandate were laid by both national legislation, which increased their visibility by separating them from external auditors, and local inscriptions, which identified them as risk management experts. Such a prominent role might contradict the usual role of an internal auditing function as being independent, meaning that it can facilitate and monitor risk management but cannot be responsible for managing the risk management systems and, as a consequence, has the *potential* to generate overflowing.

This section has briefly recounted the initial attempts to frame risk management with various inscriptions. By the end of the old millennium, several attempts had been made to stabilise risk management as an organised practice for managing uncertainty in Case Municipality. The Municipal Board and Council had defined the parameters of risk management and described the roles of the relevant groups of actors in regulations, while the IAU as the newly appointed risk management expert had attempted to establish risk management know-how through the audit report template, designed to guide internal auditors towards uniformity of objectives and expression. However, as the municipal decision-makers and the IAU were busy constructing risk management solutions, particular events had been occurring simultaneously that became visible in the early 2000s, which resulted in the frame of risk management becoming controversial and generated a number of uncertainties that will be explored in the following sections.

4.3 Scandal #1: Overflowing and subsequent attempts at reframing risk management

IAU and police investigations concerning scandal #1 revealed that over a period of six years, the municipal unit's secretary had, among other things, intermittently requested a superior officer, Director X, to sign blank payment orders which she had then completed with fictitious uses and amounts of money, and taken to the cashier's office (Regional Court, 2004). Having received the cash and spent it for personal purposes, the secretary had provided the cashier's office with falsified

[7] Risk Management Teams were also established for each of the four municipal service branches as well as a six person Executive Risk Management Team comprising representatives of the IAU, central administration and the service branches. These were executive and non-decision making bodies which focused on reporting that relates to risk management and the coordination of insurance policies.

receipts that she signed in the names of acquaintances. The investigations further revealed that the secretary had embezzled almost two hundred thousand Euros from Case Municipality. Thus, from the outset it seemed that everything was clear: the culprits had been identified and the loss to the municipality measured in monetary terms. However, as the trial proceeded to hearing the defendants and witnesses, the frame of risk management itself became subject to scrutiny as it was suggested that it was the framing devices which created an enabling environment for the loss of internal control. The final court protocol indicates that Director X, citing the principle of legality, claimed that municipal regulations and directions were too unspecific to establish the contents of his duties regarding internal control:[8]

> "[Director X] has considered that his responsibility for internal control has mainly included monitoring the actualization of the annual budget. [He] has appealed to regulations where internal control has been designated as the duty of the city manager, the deputy city Manager and the municipality's internal auditing unit. [Director X] has also appealed to the fact that…when auditing [the unit], the internal auditing function had not found anything remarkable." (Regional Court, 2005, p. 20)

Thus, Director X did not perceive the professional identity of an operational manager to include duties relating to risk management, but only those associated with regular budget control. He justified this claim with the fact that the municipal regulations did not explicitly place operational managers in the role of risk managers and, therefore, he could not be blamed for losing control over a matter that he did not even realise was his duty. In essence, the director pinpointed the framing of risk management as a source of uncertainty as it did not contain exhaustive definitions of associated responsibilities.

Moreover, Director X insinuated that, as the internal auditors' responsibilities had been defined to include risk assessment, the IAU should have noticed any discrepancies and expressed such findings in their previous compliance audit reports. The director's line of argument was that if a specialist group such as the IAU did not notice and report on risks, it was unfair to assume that a non-specialist operational manager should be aware of them. Interestingly, in another discussion regarding the investigation that the IAU conducted alongside the police enquiry, Director X held a completely opposite opinion of what and how the IAU should report:

> "The report contains statements whose accuracy is questionable…The internal auditing unit is trying to find a scapegoat and it is evident that the report is biased…[T]he description of internal control [in the unit] is flawed and the

[8] The Criminal Code of Finland (Ch. 3, Section 1), defines the legality principle as meaning "a person may be found guilty of an offence only on the basis of an act that has been specifically criminalized in law at the time of its commission." The abuse of public office, such as a superior's neglect to control his/her employers' actions, is established "based on the provisions or regulations to be followed in official functions" (Ch. 40, Section 7).

> accusation [of poor internal control] is offending.[9] A witness should be heard in this context since what is on paper is only [the IAU's] opinion." (Regional Court protocol, 31.01.2005).

Regarding the accuracy of the statements, the court protocol elaborates that the IAU reports mistakenly identify Finance Department personnel as those who first suspected the secretary of conducting questionable deeds, when in fact it had been the secretary's co-workers who reported on her behaviour. This is a relatively minor mistake on the IAU's part but it is logical that it was raised by Director X, as it served to confirm his claim that the IAU's report was not trustworthy. Director X additionally resented the report's claims that he should have made sure that the items, which the secretary claimed to have purchased, actually existed. He countered by stating that it is not appropriate for a manager to distrust employees by default, in addition to which:[10]

> "The [unit] has incurred over 6,000 receipts and it would have been impossible for me to have inspected them line by line; I am not an auditor." (Director X)

These arguments further illustrate how the director attempted to avoid blame for the loss of control by relying on an operational manager's professional identity as distinct from that of an auditor, as defined (or not) by the framing devices. They also show how perceived imperfections in the framing process, evidenced in this case by incomplete definitions of duties, generated an uncertainty that then transformed into a blame game in the courtroom.

After Director X cited the duties of his professional role, the court asked to see documents that established responsibilities relating to internal control in Case Municipality. Internal Auditor #3, whom the court heard as a witness during the trial, elucidated during the research interview that a number of instructions existed regarding a superior's responsibility for internal control. However, these disparate inscriptions had not been officially approved by the Municipal Council and given a municipal record number; thus, the court did not accept them as evidence:

> "In court they asked about our [Case Municipality] guidance documents. The court thought that only those [documents] which have been approved by the Council are valid…Although we had all these standing regulations and general charters, [the court] did not consider them worth anything. And then [the IAU manager] said that we had to gather the most important guidelines between one set of covers." (Auditor #3)

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[9] The special audit report concludes that "[t]he atmosphere that has generally prevailed in [the unit] and especially its management may be characterized as dismissive of rules and internal control. Guidance, adherence to norms, monitoring as well as the organization and implementation of internal control are considered to constrict rather than enable operations." (IAU, 2002, p. 14)

[10] In the court protocol, the following sentence is in the third person singular. To avoid unnecessary complexity, it has been transformed into the first person.

These events illustrate how risk management generates uncertainties in a situation where multiple frames coincide. The unofficial risk management inscriptions provided a conduit for overflowing by opening the door to another world, namely the legalistic frame in which the Regional Court judge unexpectedly ended up criticizing these Case Municipality's framing devices for lacking proper procedures to prevent fraud. The court's problematisation gave rise to uncertainties concerning the legal aspects of installing risk management solutions, such as the problematic issue of the extent to which risk management solutions need to adhere to a particular bureaucratic protocol (i.e. acceptance by the council) for them to be considered adequate in a legalistic sense. An extreme position in this sense is that municipal managers cannot be expected to determine appropriate behaviour, and therefore every eventuality needs to be taken into account and addressed in formal regulations.

Considering that the risk management survey conducted by AFLRA (1994) had pointed out the lack of officially approved guidelines in municipalities, the court's position with regard to the documents is not that surprising. In addition, when Case Municipality's Executive Board had discussed the overall structure of the municipal control system in 1999, the IAU manager had informed them that:

> "[S]uperiors' risk management roles and responsibilities, as outlined in regulations and standing orders, are incoherent." (Case Municipality, 1999)

Thus, imperfections in the framing process had to some extent been acknowledged, but it was only Director X's accusation and the court's strong stance that served to make the framing of risk management controversial. Auditor #3's comment above highlights how overflowing that resulted from the collision of two frames gave impetus to the IAU manager's subsequent attempts to contain the overflow by investing in new framing devices. The causal connection between the trial and the new inscriptions was explicitly mentioned by the IAU manager when he introduced the Guideline in a municipal board meeting. In his PowerPoint presentation, which is annexed to the meeting minutes, the slide recounting the background to the Guideline contains the following bullet point:

> "[B]ecause of the manifestation of governance problems, we wanted to harmonize acceptable procedures and put on the record what good governance is." (IAU Manager, PowerPoint presentation)

To regain control over the uncertainties and let the court become part of the framing, a reframing occurred. The IAU manager quickly mobilised a team comprising local high-ranking officials and politicians (Case Municipality, 2004) as well as a tried-and-tested inscription device, the COSO model, to construct the Guideline and have it approved in 2004 as the municipality's official risk management document. The IAU tried to enrol other actors into accepting this new framing device with the help of knowledge claims; that is, by appealing to prestigious actors such as the Institute of Internal Auditors and the COSO committee, as well as the utilisation of COSO in other organisations.

> "Internal control systems based on the COSO report (www.theiia.com or www.coso.org) are widely applied in both public administration and business organizations." (IAU, 2007, p. 6).

The attempt to reframe involved considerable investment as the team developing the Guideline comprised high-ranking members, such as Case Municipality's finance director and chief administrative officer, who met a total of ten times, consulted external risk management experts and requested comments from other chief officials within the administration. Furthermore, alongside acceptance of the Guideline that describes the internal control and risk management responsibilities, procedures and systems in Case Municipality, the internal auditors' responsibilities increased to include biannual good governance training sessions for top management and unit directors, and the associated biennial survey that the auditors began to design and administer. Thus, we see an increase in both inscriptions and professional responsibilities involved with the reframing of risk management.

This controversy over the framing of risk management reflects a cold situation (Callon, 1998b) in that, despite being sudden, it was not completely unforeseeable, relevant actors were quickly identified and options concerning how to proceed were mostly available.[11] Attempts to stabilise risk management occurred in the form of the Guideline that contained explicit definitions of municipal groups of actors and their duties, highlighting the responsibility of directors and top management. In addition, operational managers' and directors' risk management knowledge base was considered to accrue with the help of training sessions arranged by the IAU, and the regular risk management survey was believed to inform the IAU on how well they had succeeded in training the managers. Although the only concrete responsibilities that the Guideline introduced concerned the internal auditors themselves, the group working on the document obviously hoped that these voluntary instructions would suffice to prevent future malfeasance.

To summarise, in this section we analysed our empirical data on municipal risk management in terms of (re)framing and overflowing. We indicated how some of the framing devices, which had been implemented to diminish organisational uncertainties by transforming them into manageable risks, actually provided a conduit for overflowing. This occurred when the frame of risk management became problematised in a courtroom, first by an operational manager and his defence council and then by the judge. Unexpected effects generated by the frame include uncertainty concerning the professional responsibilities of operational managers as defined by the framing devices and the degree of independent thinking that municipal managers might be considered to possess. These are linked to uncertainty concerning the types of document that might actually be considered to constitute the frame of risk management. It is interesting to note that the latter uncertainty is linked directly to written documents and results in legalistic discussions on whether these documents have legal status without being approved in the formal hierarchy of the municipality. Such issues illustrate how uncertainties can arise when the frame of risk management

[11] The opposite are 'hot' situations, which refers to unforeseeable major incidents on which there is no existing knowledge base, such as the eruption of the HIV/AIDS epidemic in the 1980s (Callon, 1998b).

clashes with another frame and poses challenges for the calculative agencies that insist on risk management. After the manifestation of such uncertainties, the IAU manager, who regarded the overflowing as a product of imperfections in the framing process, subsequently attempted to contain the overflowing by making considerable investments in further framing devices, such as the COSO-based Guideline, which also expanded the internal auditors' own professional duties regarding risk management. However, as Callon (1998a, p. 24) reminds us, as attempts to refine the frame of risk management occur, the (re)framing devices offer additional leakage points where further overflowing can occur. This is illustrated in the subsection below.

4.4 Scandal #2 and subsequent reframing

In 2002, Case Municipality's Secondary Education Institute (SEI) had acquired the municipality's top management's permission to establish a non-profit vocational school (VS) across the border in Russia. In his official proposal to establish the school, Director Z had assured top management that no additional risks would accrue to the municipality from the project since a Russian national would be recruited to run the operations. Thus, Director Y from SEI, a native Russian, was chosen as VS's managing director and his superior, Director Z, became the chairman of the board. To initiate the training activity, several pieces of SEI's machinery were sold to VS, which agreed to pay for them in instalments. As the training soon ceased due to lack of proficient personnel, Director Y decided to utilise the machines for commercial purposes; a questionable activity considering VS's institutional and non-profit status. Furthermore, VS never paid SEI for the machines although it resold them to two of its subsidiaries, established by Director Y without permission from the municipal management. In addition, Director Y arranged for the majority of VS's income and expenses to be recorded in unofficial accounts. In 2005, VS's bank accounts were frozen by the Russian authorities as a result of neglected tax payments. However, the company naturally needed money to continue operations. Director Z then began to withdraw large amounts of cash from SEI's bank account in Finland, to be transported across the border by Director Y. The appearance of these withdrawals in SEI's bank statements raised suspicions among other SEI personnel and, late in 2005, police investigations were initiated alongside IAU audits to measure the monetary losses to Case Municipality and identify the guilty parties. In 2006, the case was prosecuted and the Regional Court sessions began.

When questioned on his neglect to inspect accounts and take action after learning of the existence of the black money account, Director Z defended his inactivity by stating that:

> "in practice, it is impossible to operate in Russia without black money…The black money account is not a relevant issue in this context because in Rome you do as the Romans do" (Regional Court, 2010, p. 18).

Thus, Director Z had ignored the Guideline and other risk management recommendations as he had felt that their implicit notions concerning the appropriate manner in which to conduct business did not apply in such a different culture.

These events constitute another illustration of how uncertainties emerge when multiple frames coincide. One of the risk management framing devices, Director Z's proposal to the municipal management to establish the vocational school, emphasized that the recruitment of a native Russian (Director Y) would minimize the risks involved in the operations. However, and somewhat ironically, by opening the door to the world of doing business in Russia, Director Y not only helped VS establish itself but also provided a conduit for external influences such as black money accounting. The overflowing then emerged as the risk management frame was dismissed by Director Z, who considered the frame to be so context-bound that its recommendations could not be transferred to another culture. He therefore indirectly pinpointed the frame of risk management as a source of uncertainty, as it did not provide assistance in operating in a foreign environment.

Unlike the case of the first scandal, this time the court did not join the problematisation of the risk management frame. On the contrary, Director Z's attitude towards risk management was duly noted by the Court, which stated in the justifications of its final decision that:

> "[Director Z]'s account leaves the impression that he has been indifferent about whether or not monitoring and control of the activities in Russia have been properly arranged…Taking care of internal control would have been especially important considering the Russian operating environment and the risk factors associated with it." (Regional Court, 2010, p. 20)

In addition, the court explicitly recognized and thus approved of the IAU's Guideline by referring in its verdict to the Guideline's section 5.6, second paragraph, according to which:

> "[A] superior must constantly monitor the activities for which he is responsible and also take measures immediately when he notices activities that are in violation of legislation, other rules, guidelines and decisions, or otherwise inefficient or inappropriate." (IAU, 2004, p. 11)

Yet, even though the frame of risk management was thus accepted by the court, the IAU considered the scandal to constitute an overflow. The IAU manager interpreted the emergence of VS's illegal activities as an indication of the Guideline and other risk management practices being insufficient, as evidenced by the following excerpt from his annual account to the Municipal Board:

> "During the year 2007, derelictions of superiors' internal control duties have arisen. Inadequate risk management and the breaking down of internal control have inflicted financial losses on the municipality and damaged its image…Monitoring and reporting systems must be developed until they are adequate…Risk management related training and high-level coordination must be developed further. Operational managers' and superiors' awareness of, and commitment to, risk management as part of everyday management and planning must be increased." (Case Municipality, 2008)

The IAU thus utilised the events to problematise the frame of risk management for being inadequate due to a lack of risk awareness among operational and more senior managers. As such, the IAU effectively participated in the construction of an overflow that related to its own guideline. They subsequently argued that the overflow needed to be contained by further refinements of the frame, while simultaneously emphasising the need for more training and further measures to achieve increased awareness. Basically, this refinement of the frame also meant an expansion of risk management responsibilities that were distributed in Case Municipality and the need to allocate budget accordingly. An uncertainty then emerged regarding how the IAU could enrol other municipal actors to accept the need for reframing at a time of continued economic hardship in Finnish municipalities. That they did succeed in this effort might not be unrelated to the coincident actions of the National Accounting Board. This entity published a document requiring municipalities' annual reports to contain an assurance statement; that is, an account on the organisation of internal control, risk management and internal auditing. In this context, the national inscription defined new responsibilities for several actors:

> "[T]he Municipal Board must present an Assurance Statement…It is appropriate to divide the preparation of the Statement to various task areas so that Committees and Boards of Directors prepare for their part the information to be presented in the Statement." (National Accounting Board, 2008, p. 18)

Through this requirement, the municipal actors were made accountable for risk management, not only to the external auditors but to the entire readership, however wide or narrow, of the annual reports. The inscription also contained a definition of the duty of internal auditors as being "to assess, *using systematic methods*, the efficiency of internal control and to support superiors and functional bodies in operationalising risk management" (National Accounting Board, 2008, p. 33, italics added). The IAU manager was thus able to appeal to both the emergence of local uncertainties as well as the inscription produced by a national actor to justify the introduction of a new framing device, the COSO-ERM based assessment model (Appendix 3). Such a reconfiguration again required considerable resources; the IAU's annual reports indicate that developing and piloting the assessment model was at the top of the staff's priority list in both 2007 and 2008. The final outcome can be deemed successful in addressing the ambitions of the National Accounting Board as it is both a systematic method which the IAU can apply to the assessment of risks and a tool enabling Case Municipality's committees and boards of directors to report their share of the assurance statement. In one of the interviews, the IAU manager expressed his firm belief that this framing device would be able to capture a wider range of uncertainties than the template designed for regular compliance audits:

> "[W]e have developed this great form with which we can bring forth management issues and risks that do not usually arise in the normal checkups [compliance audits] because those focus only on one process, such as a big acquisition process, not on a unit's overall management. And this COSO-based [model], it doesn't look at things from the viewpoint of, for instance, the legality of one single decision but from the viewpoint of overall good governance and risk management…When you have filled out that piece of paper [the assessment form], then you can with good conscience say that if the things that are there are taken care of, you don't have to think that something goes wrong because it [the

> model] tries to comprehensively cover things related to management." (IAU Manager)

The IAU manager also considered that, when properly utilised, the new inscription device would increase managers' risk management knowhow:

> "We say in the cover letter that it's not easy to fill out the [assessment model], and the process is not that you sit down for fifteen minutes and fill it out, but you have to invest time in it. And then if you discuss it in the management group the work takes days, but it's the unit's development work in the way that we see it." (IAU Manager)

To summarise, in line with Callon's proposition that overflowing and disorder are the norm due to the inevitable imperfection of framing, the risk management solutions implemented in Case Municipality after the first scandal did not succeed in preventing the occurrence of a second malpractice case. The new risk management inscriptions, quite understandably, did not explicitly address control and risk issues relating to municipality-owned subsidiaries that operate beyond national borders. By becoming VS's managing director, Director Y literally provided an opening into a new world, a different country from which new frames and uncertainties emerged. The associated overflow emerged in court when Director Z blamed the frame of risk management for not being applicable to other cultural contexts. However, in contrast to the first scandal and the associated court hearing, on this occasion the IAU participated in the amplification of the overflow by problematising the risk management system for not being properly developed. The unexpected event that had caused economic loss to Case Municipality was employed by the IAU as an opportunity to convince municipal management that increased risk management was necessary. An uncertainty then emerged concerning what it would take to convince senior management on the relevance of further investments in risk management. Most probably, it was the National Accounting Board and the perfect timing of its actions regarding further requests for municipal risk management that helped transform the uncertainty of risk management into certainty and approval. As such, the National Accounting Board indirectly participated in co-producing the IAU's mandate, which enabled the latter to expand its risk management programme beyond its own boundaries. The IAU manager believed that with one of the new framing devices, the COSO-ERM based assessment model, they had successfully defined the parameters of risk management and also provided a device with which municipal units' operational managers could develop their risk management awareness. This illustrates how a risk expert believes he has properly identified the actors and their responsibilities, but then disconcerting events unfold that, in our case, take the form of a comprehensive debate on the usefulness of risk management, as will be explored in the next section.

4.5 Epilogue: Current state

When discussing risk management, the interviewees usually mentioned Case Municipality's two scandals without prompting. In this context, the managers' opinions reflected an implicit recognition of inevitable imperfections in the framing of risk management:

> "No matter what kind of guidelines you have, you can never be completely sure that you have closed off all possibilities for malpractice…At the end of the day you just have to trust that most people adhere to the rules." (Senior Manager #2)

However, for the managers, the scandals had also concretised the extent of their responsibility for internal control, with professional repercussions:

> "Sure they [the scandals] have affected how we operate…Nowadays, I always emphasise to my team that whatever regulations we have here, be those standing orders or my delegation decisions, they [the employees] must really pay attention to staying within the designated limits…If I, for instance, allow someone to make purchase decisions or sign contracts and I don't monitor them and then something happens, it's my responsibility. This is what I think was the main issue in those two cases [scandals]." (Manager # 2)

The present-day overflowing of risk management relates to managers' feelings that the "bureaucratic" COSO-based tools cause them difficulties, measured mainly in terms of resources spent:

> "These people who have worked here for long say that all kind of control is increasing all the time; that you have to report your shoe size every other month. And it's all away from your working hours…A lot of resources are put into that. It's interesting as a resource usage phenomenon, that a huge amount of time is invested in it, also our various managers' time." (Manager #3)

This quotation points to the identity implications of risk management inscriptions as the interviewee suggests that such reporting exercises are not in managers' interests and (s)he is very sceptical of them being a part of managers' responsibilities. In addition, the managers suggested that the assessment model contained implicit and false interpretations regarding their interests:

> "You can laugh at it [the term COSO] behind its back like we do…People don't know what these words mean. And they will never learn because when it comes to daily work, risk management is something that should be handled on a quite general and concrete level; like, how have you arranged your exits, do you have a door through which to escape if a customer threatens an employee, these things that are related to everyday work. But the type of separation that is in these forms and questionnaires, if I remember correctly there were 13 sub-categories for risk management. I can't tell those apart." (Manager #5)

This is another illustration of how uncertainties emerge when multiple frames meet in the workplace. In this case, the frame of risk management actually competes with the frame of operational managers' regular work. The COSO-based devices provide an opening to another world, in which risk management means knowing the answers to numerous, abstract, detailed questions. Managers fail to see how accepting such a framing will assist them in their aspirations to become good at managing risks on a daily basis. The managers were also angry with regard to the effects of risk management inscriptions on the practice itself:

> "The whole gamut of plans and concepts is such that you can't keep up…There's this form [the assessment model] that you have to fill, and there are the risk management plans and the catastrophe plans and whatever. They suffer inflation. Their bottom drops out when there are too many of them, people don't take them seriously. There's one person in our organisation doing sheltered work, someone who just ended up here. We have delegated these risk management issues to him, specifically in the spirit that he'd have at least something to do. So their priority in our thinking is not very high. Despite all these forms, risk management is not taken so seriously because it's overgrown. Cancer cell sounds too dangerous; it's like an overgrown hedge." (Manager #5)

The arguments employed to justify the implementation of risk management solutions are not aligned with the managers' interests as the latter do not feel that utilising them will further their professional development, but rather hinder their work. Although risk management is perceived as extremely important, the manner in which it has been framed by the IAU is considered too far removed from the frame of managers' daily work and the inscriptions are reportedly only employed at a superficial level, to go through the motions of compliance. The uncertainty of risk management which emerges here relates to the definition of the practice: what exactly can be considered as risk management and whose interpretation of it should guide practical operations? Some of the interviewees also indirectly aimed their discontent at the framing, by pointing to the objectives and beliefs of the IAU manager:

> "The IAU, in so far as it concerns [the IAU manager], looks for mistakes and failures, it does not look into how we could support these municipal actors in their efforts to prevent risks. It is control spirited; in other words, it represents an organisational culture that is completely *passé*. And that thing is personified in [the IAU manager]. The driving force behind his personality is that you must not make mistakes. He is careful himself and then he transfers that feature into these [risk management] systems." (Manager #5)

The interviewee thus claims that the framing of risk management is imperfect as it reflects the identity features of the IAU manager, these being first and foremost a strong fear of failure. The quotation also indicates another disturbing feature of the framing in that it has, by placing actors in specific roles, awarded the IAU responsibility for risk management that it is reluctant to share with operational managers.

Senior managers from central administration were also of the opinion that the IAU had a strong role in the overall expansion of the risk management frame. They insinuated that the increase in inscriptions can be explained by the decrease in the IAU's previous duties:

> "As I understand it, our internal auditing function is quite big…Previously the IAU assisted our Audit Board together with the external auditors, but now the Audit Board has increased the use of an external auditing firm. Also, some units have been transferred outside the municipal organisation [corporatised], so you could assume that these changes would have caused a reduction in the number of IAU personnel, but this has not taken place…An organisation always finds something for itself to do…But I don't know who would be the right person to evaluate what should be done. The IAU is practically the only unit that can evaluate all others, but none of the others can evaluate them." (Senior Manager #2).

In a similar manner to their operational managers, the senior managers perceive a connection between the IAU's professional goals and flaws in the framing of risk management. According to such a perspective, one of the IAU's main objectives would be to legitimise its existence in the organisational hierarchy, and this ambition would then be reflected in the number of devices included in the frame. Thus, the frame of risk management would simultaneously be employed to promote the IAU's version of risk management and the existence of the IAU itself. This framing has created power struggles between the IAU and managers at all levels, bringing an additional perspective to the previously noted uncertainty concerning the definition of risk management. The framing devices act as tools that position the IAU in a type of superior or management role, rather than a more facilitating and/or monitoring role, and the senior and operational managers are even more suspicious of the usefulness of the tools for everyday management.

Although both operational and senior managers expressed in the interviews their discontent with the problems caused by the framing of risk management, they have not voiced these feelings in public. This makes it difficult for outsiders to detect the overflowing. The managers believe that expressing their opinions in public will not help as the only person who can actually suggest to the IAU that they reduce the usage of risk management devices is the city manager, who in turn is reluctant to interfere:

> "It's difficult; I understand well the city manager's point of view. He wants to cherish good relations with [the IAU] but it leads to not being able to truly evaluate [the IAU's] functions and changing them. It's difficult to provide directions to the IAU when it's in that position." (Senior Manager #1).

Another factor supporting the IAU's position is that its work has been formally approved by external experts. In the latest quality audit conducted by outsiders, it was found that "the internal auditing unit of [Case Municipality] abides by the professional standards and code of ethics of International Internal Auditing (IIA)" (IAU, 2011). Such purification work adds to the stability of risk management and the IAU's role therein, but it can also momentarily cast aside tensions, debate and disagreements between operational managers and the IAU regarding the framing of risk management.

5. Concluding discussion

In this article, we set out to study the effects produced by risk management in the long term, starting from its national inception in Finland in the mid-1980s and proceeding, in a local government context, via two significant episodes to the present day and state. We studied the process of how risk management solutions first emerged, how risk management was further calibrated and how risk management responsibilities were distributed throughout Case Municipality with the significant help of various technologies. We also showed that the instigator of risk management within Case Municipality was largely the Internal Auditing Unit (IAU), which took action when unexpected events occurred and risk management solutions came under pressure. Our paper contributes to three streams of literature: first, we add to the risk management literature by showing how uncertainties can be generated by risk management itself; secondly, we add to the knowledge on internal auditing by showing how internal auditors assume a central role in the development and assessment of risk management; thirdly, we develop Callon's work on framing by showing how different frames can relate to each other. In the following, we discuss each contribution in more detail.

Uncertainties generated due to risk management

While risk management has attracted a considerable amount of scholarly attention, there are very few processual studies on the effects generated by risk management during its development and application. Our purpose in the present paper is to address this gap in the research by exploring uncertainties generated by risk management. Conceptually, we combined Michel Callon's notions on framing and overflowing with the well-known but often confusingly employed terms risk and uncertainty. In theoretical terms, we analysed risk management as a socio-technical network and we illustrated experts' assumptions on exhaustively framed risk management turning to disappointment as overflowing occurred, giving prominence to unforeseen effects, or uncertainties, that created confusion rather than order, and threatened the stability of risk management practice.

Regarding the effects of risk management, we found that each time internal auditors thought risk management devices were in place, parameters defined and knowledge bases established, disconcerting events occurred. These episodes generated further investments into the frame of risk management, illustrating well the simultaneous nature of (re)framing and overflowing. We found that risk management itself gave rise to a number of uncertainties: first, uncertainties relating to legal aspects of risk management solutions, particularly the issue of which types of document are considered legally valid; secondly, uncertainties relating to the definition and operationalisation of risk management; thirdly, uncertainties relating to the resources available for expanding risk management.

More generally, the above uncertainties relate to the professional identities and responsibilities of operational managers as defined by the framing devices. Such issues emerged in the aftermath of the first scandal, when it was suggested that the extant documents did not contain adequate definitions of operational managers' risk management duties, after the second scandal when it was claimed that managers' awareness of their risk management duties was still insufficient, and during the interviews of the operational managers, when they suggested that reporting on risk management is not in accordance with their professional interests and, therefore, it should not be their responsibility. Ultimately, these types of uncertainty highlight the futility of the perennial question concerning the amount of explanation needed in risk management guidelines and instructions to ensure managers' comprehension and compliance. In broader terms, our longitudinal study makes visible an unending process in which risk management becomes increasingly sophisticated but paradoxically continues to produce various types of further uncertainty. This is characteristic of all attempts to stabilise matters in a continually changing world.

The uncertainties relating to the practical implementation of risk management that emerged in Case Municipality reflect Power's (2004) and Corvellec's (2009, p. 300) suggestion that formal risk management can actually destabilise and disrupt existing or "silent" practices of risk management. Case Municipality's operational managers argued that standardised risk management solutions not only clashed with their professional conceptions and common sense perspectives on the practice but, by proliferating and becoming rather all invasive, were also beginning to alienate them from these practices. Perhaps less formalised risk management, or what Mikes (2011) refers to as risk envisionment, might potentially enable smoother and less controversial activity. However, such development is not likely as indicated by Miller et al. (2008), who refer to the extensive international and national regulations of risk management. In any event, all objections and debates concerning the effects of risk management are likely to continue at least as long as the perceptions of operational managers are not included in risk management solutions. As such, Case Municipality might find itself with an unstable risk management system that is susceptible to further overflowing.

Therefore, what are the implications of our study in terms of the economic effects of risk management? Following the ontology of Actor-Network Theory (ANT) implies that reality is not outside but inside practitioners' calculations. This means that practitioners do their best, as we have shown here, to identify uncertainties and propose them as risks by following the procedures and established categories of guidelines and recommendations based on, for instance, COSO. These attempts result in a particular set of risks that are dependent on the tools employed in their definition. Risks do not "exist" before they are a fact that can be clearly witnessed and agreed upon by most parties; until then they are just a construction, a set of beliefs, which might or might not ever become a fact. Risk management is supposed to reduce uncertainty by following procedures dictated by the framing. However, that very framing generates overflowing and thus emphasises the debated and more or less controversial nature of the manner in which we calculate risks. All the uncertainties and unending reframing to perfect risk management illustrate that risks do not exist outside but inside the practices (Latour, 1999).[12] Analogously, we are not able to state definitively

[12] Skærbæk and Tryggestad (2010) show this in relation to strategy development in a company. There, one set of accounting devices was mobilised to show a type of reality and the associated strategy, whereas another set of accounting devices was mobilised later to show a very different reality and its consequent strategy. This shows that, depending on the type of calculative tools mobilised, different realities can be created. Reality is not just 'out there' as a contingency approach would assume.

whether risk management in total is worthwhile in economic terms to Case Municipality. Certainly, development and refining of the frame of risk management involve investments; however, their total amount is difficult to calculate. We rarely see organisations with an account in the general ledger where everyone taking mitigating or other actions in respect of risk management can make their entries. Moreover, when attempting to calculate the costs of risk management, we are faced with the troublesome question concerning how to set the scope of what should be included or not in the calculation. Would it, for instance, be relevant or even possible to calculate the costs of standardised as opposed to common sense risk management? The same difficulties apply to the benefit side. The problem is that we do not know whether some mitigating action was necessary as we cannot know if events that can cause risks might have occurred had mitigating action not been taken. All that we know for sure is that many of the involved managers in Case Municipality had severe doubts concerning the worth of risk management as defined by the frame.

Internal auditing and risk management

Regarding internal auditing and risk management, our main finding was that the IAU has played a central role in the development and assessment of risk management. The unit has designed most of the risk management solutions implemented in Case Municipality and has reacted to unexpected events by expanding the framing, which has placed them even more centrally in the risk management system. This might contradict the internal auditors' perceptions on their traditional role and professional guidelines, according to which (e.g. Institute of Internal Auditors, 2009) internal auditors can be consulted by management although they should not perform risk management in practice. As uncertainty in Case Municipality has prevailed, the IAU has drifted away from its traditional role towards that of management, a movement which might prove to be a potential source of further uncertainties. Even though only a few interviewees seemed highly conscious of the problematic case concerning the IAU being formally responsible for the development of risk management, they did touch upon the topic. In addition, there are indications that top management and the city manager are not very active in the discussions. Thus, operational managers not only have to consider whether the IAU's *monitoring* reports are fair or not but they also have to assess the IAU's *management* role, that is, whether or not the risk management solutions are indeed worthwhile and economically justified. In principle, these concerns represent two different discussions. However, in practice it might be difficult to tell them apart as the notions of internal control, internal auditing and risk management seem to have discursively merged in Case Municipality, creating a type of melting-pot or hybrid that, given the malleability of the founding disciplines, is likely to be unstable and susceptible to further uncertainties.

Such findings are associated with Spira and Page's (2003) suggestion that the close alignment of risk management with internal control and its formal reporting to boards and committees leads to a type of game concerning who is responsible for failures when they occur. It seems that, at least with internal auditing as a risk monitoring activity, such accountability easily turns into legal exercises that result in enfeebling organisations rather than increasing their learning and development. This might result in a situation in which legal systems make it even more difficult to create enthusiasm and engagement among risk practitioners. It might also generate instances of gaming where managers perceive risk management as a matter of simply satisfying legal documents' instructions rather than as an opportunity to innovate and further develop both the systems and their professional abilities.

We also found that it was the IAU which introduced the COSO model into Case Municipality in 2004. In this context, it is interesting to note that auditing firms in general have played an important role in the development of COSO and that, for instance, PricewaterhouseCoopers played a central role in the COSO organisation (Hayne and Free, 2013). In Case Municipality, an external Finnish audit firm was asked to evaluate the IAU and its risk management practices based on COSO. Not unexpectedly, this resulted in the audit firm purifying (i.e. confirming the relevance of) the IAU and its risk management practices on several occasions, most recently in 2010. However, given the prominence of COSO in national audit regulations and with local audit firms monitoring and evaluating risk management practices, we witness a type of closed circle in which propagators of risk management continuously purify practices and, as such, silence the continuous debates between internal auditors and their counterparts within organisations. This also implies that the purifying actions of COSO and the external auditors can help make risk management a relatively stabilised practice despite the fact that overflowing can occur at any moment in time. This returns us to the discussion concerning the benefits of risk management. We can, of course, be critical of the whole manner in which risk management frames are established and maintained. However, to position ourselves as a 'judge' and deem the practices of risk management useless would be as incorrect as the COSO movement convincing several countries around the globe (Power, 2007 and 2009; Hayne & Free, 2013) that it is always worthwhile. Such claims are based on assertions and beliefs and not knowledge beyond question. We thus encourage COSO spokespersons, auditors and others involved to engage more thoroughly in the debate concerning whether risk management is, for instance, too bureaucratic and time consuming for operational managers and other organisational actors. In this sense, some self-reflection on the part of auditors would be highly warranted.

Overflowing and multiple frames

Overall, we found Callon's framework useful for understanding the dynamics associated with internal auditors' attempts to implement and continuously develop risk management as a response to emergent difficulties. It allowed us to illustrate how the auditors' and other actors' roles and responsibilities changed during (re)framing processes, in particular how the auditors as the strategists of risk management had *their* identities changed unexpectedly as the overflowing occurred. Such instances where the strategist, i.e. the oppressor, can also be the object of unexpected events, are rarely reported in the majority of critical studies. The twin notions of framing and overflowing proved particularly helpful in illustrating how the quest for efficient risk management solutions is inextricably intertwined with the emergence of unexpected events. Furthermore, the development of Callon's framework with the notion of frame plurality enabled us to consider the eventuality that different frames have linkage points to other frames that open up unexpected realities and turmoil. As was found in the case analysis, neither the IAU nor any other person had considered the possible link between their designs and the legalistic frame before the unexpected fraud case arose and the court became interested in the risk management framework of Case Municipality.

In Callon's terminology, overflowing refers to *individual actors* feeling that their exclusion from a frame causes them some sort of harm. In turn, the notion of frame plurality emphasises that individuals simultaneously act in several social worlds and their roles in the interactions are defined by various frames. As actors are thus inseparable from the framing devices that define their identities, we argue that analytical coherence is increased if overflows are considered as instances of frames colliding with other frames, rather than only from individual perspectives. During the first scandal of our case, the Regional Court defence council and judge represented the historically prevalent and uncontested legalistic frame that clashed with the frame of risk management, with the consequence that the latter needed to be reconfigured to comply with the former. During the second scandal, the frame of risk management was challenged by the frame of operating in Russia, with an operational manager acting as the connection between these two different worlds. The competition between these frames developed into a full-blown overflow when the IAU problematised the frame of risk management for being insufficient, and initiated reframing efforts to further emphasise the responsibilities of superiors. Finally, in the current situation, the operational managers' discontent with the frame of risk management stems from the manner in which their identities are defined by the frame of their regular work. The managers' professional identity involves a common sense approach to managing risks, which is presently excluded from risk management solutions devised by the IAU. That this overflowing has not yet resulted in reframing might be explained as an instance of the risk management frame largely overlapping with the professional frame of internal auditing, which in turn has been purified by external consultants.

By exploring the uncertainties of risk management, this study provides further evidence that (risk management) inscription devices not only offer conduits for overflows but also assume an active role whereby they become involved in reconfiguring the duties and interests of actors who are equipped with them. This is particularly illustrated by how the IAU manager developed new interests when the tools and inscriptions in operation generated unexpected uncertainties. Correspondingly, when new solutions and designs were identified and implemented, the operational managers came to realise that new responsibilities were being imposed on them in an unending process of transformation. Inscriptions and devices certainly play an active role in producing and reconfiguring identities and roles, not just reproducing them, and should therefore be included in advanced accounting scholars' studies on accounting practices.

Limitations and suggestions for further research

Although Callon's framework holds considerable explanatory power in relation to the events analysed in this paper, it is not without limitations. The first difficulty associated with its application is common to all ANT-inspired studies, regardless of whether they are based on the writings of Callon or Latour; namely, that they require the collection of an enormous amount of documentary and interview material for the purpose of reconstructing a plausible and credible chronology of events relating to the focal phenomenon. As ANT research is particularly interested in answering *how* as opposed to *why* something occurred, it is crucial to ensure that the empirical evidence sufficiently covers the entire period under investigation. In the context of the present paper, this meant interviewing particular individuals several times, making recurrent visits to city archives to locate yet another historical document which had been alluded to in another data source, and triangulating court documents pertaining to Case Municipality's scandals with interview information and IAU's reports. The second difficulty, which pertains to Callon's framework, is the sometimes superfluous definitions in his writings and the associated feeling, for some readers, of a lack of exact definitions. In our opinion, the definitions are clear although we did consult several of Callon's publications in an attempt to ensure consistent employment of the relevant concepts. In addition, to increase clarity from our readers' perspective, we provide in the theoretical section an extensive explanation on the basic concepts together with illustrative examples relating to the risk management/internal auditing context.

The limitation of our study relates to the specific uncertainties that were identified in this particular case setting. Further research will undoubtedly uncover other types of problematic uncertainty. Moreover, we suggest that, in the future, more empirical case studies be conducted on the effects of risk management inscriptions by studying in greater detail how risk management systems are translated into organisational practices. Such studies would serve to affirm or reaffirm the case that risk management results in generating a stream of uncertainties, among them the important question of how the risk management function can meaningfully be anchored within an organisation without contravening the basic rules of internal auditing. Further emphasis is also needed on the specific elements of risk management inscriptions and tools, the types of effect they produce and the extent to which existing solutions have incorporated various dimensions of the debate on risk management inside and outside the focal organisation.

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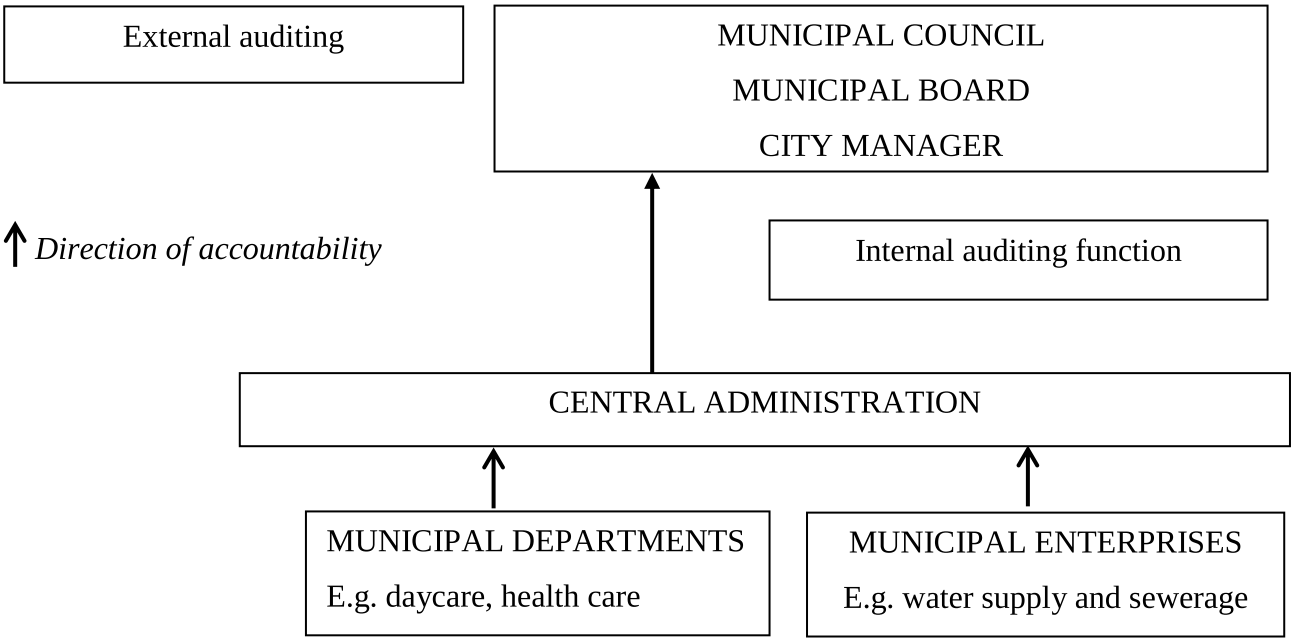
APPENDIX 1. Semi-structured interview guides

Questions for municipal managers:
- What is your position in the organisation? How long have you worked there?
- Can you tell me about risk management in the municipality/your unit?
    - How has it developed over the years?
- What is your opinion on the risk management guidelines and requirements that are currently applied?
    - Are they useful in your work?
    - Is the advice that accompanies, for instance, the self-assessment forms sufficient?
    - How would you improve risk management in the municipality?
- Can I see some examples of risk management documents that your unit produces? Can you tell me how you decide on their contents?
- There have been some internal control problems in the municipality:
    - How would you describe what they were all about?
    - Do you think the control problems have affected risk management in the municipal organisation/your unit? How?
- How is your relationship with the internal auditing unit?
    - How often do you communicate with them?
    - Have you provided any feedback to them regarding risk management?

Questions for internal auditors:
- What is your position in the organisation? How long have your worked there?
- Can you describe risk management in the municipality?
    - Who are the main actors involved with risk management in your unit (the IAU)?
    - What kind of solutions does risk management entail? How do you conduct the associated audits?
    - How has risk management developed over the years? Have there been any major events that would have affected the development of risk management solutions?
- How do you feel about the risk management solutions that have been implemented?
    - Is there anything that you would add or take away?
    - Have you received feedback on the risk management solutions from the managers of other units? How would you respond to such feedback?

APPENDIX 2. Administrative structure of Case Municipality


External auditing
MUNICIPAL COUNCIL
MUNICIPAL BOARD
CITY MANAGER
Direction of accountability
Internal auditing function
CENTRAL ADMINISTRATION
MUNICIPAL DEPARTMENTS
E.g. daycare, health care
MUNICIPAL ENTERPRISES
E.g. water supply and sewerage

APPENDIX 3. OUTLINE OF THE ASSESSMENT MODEL

1. Governance and Control Culture

2. Risk Management (RM)

Focus of assessment	Target state	Present state	Verification	Observations
General principles of implementing risk management	RM has been implemented in accordance with municipal risk policy and decisions			
	RM responsibilities have been defined and the persons responsible possess adequate expertise			
	Adequate RM training has been arranged			
Risk management plan	RM plan has been approved and updated			
Risk detection	Risk detection is based on a systematic method and is part of the planning and monitoring conducted by management			
	Relevant risks are detected			
	Detected risks are documented			
Risk assessment	Detected risks are assessed systematically			
	Risk assessments are documented			
Responding to risks	Responses have been designed for those detected and assessed risks that are relevant			
	The costs of responding to risks have been estimated			
	Risks have been assigned owners			
Reporting on risks	Reporting has been arranged appropriately			
Own assessment of the state of risk management:				

3. Control Activities
4. Reporting and Communications
5. Monitoring