

AAAJ

Accounting, performance management systems, and accountability changes in knowledge-intensive public organizations

A literature review and research agenda

Giuseppe Grossi

*Kristianstad University, Kristianstad, Sweden and
Department of Economic Analysis and Accounting,
Nord University, Bodo, Norway*

Kirsi-Mari Kallio

*Department of Accounting and Finance, Turku School of Economics,
University of Turku Pori Unit, Pori, Finland and
Department of Accounting and Logistics, School of Business and Economics,
Linnaeus University, Växjö, Sweden*

Massimo Sargiacomo

*Department of Business Administration,
D'Annunzio University of Chieti-Pescara, Pescara, Italy and
Department of Social Sciences, Gran Sasso Science Institute, L'Aquila, Italy, and*

Matti Skoog

*Faculty of Social Sciences, Business and Economics,
Åbo Akademi University, Turku, Finland and
Stockholm Business School, Stockholm University, Stockholm, Sweden*

Abstract

Purpose – The purpose of this paper is to synthesize insights from previous accounting, performance measurement (PM) and accountability research into the rapidly emerging field of knowledge-intensive public organizations (KIPOs). In so doing, it draws upon insights from previous literature and other papers included in this special issue of *Accounting, Auditing and Accountability Journal*.

Design/methodology/approach – The paper reviews academic analysis and insights provided in the academic literature on accounting, PM and accountability changes in KIPOs, such as universities and healthcare organizations, and paves the way for future research in this area.

Findings – The literature review shows that a growing number of studies are focusing on the hybridization of different KIPOs, not only in terms of accounting tools (e.g. performance indicators, budgeting and reporting) but also in relation to individual actors (e.g. professionals and managers) that may have divergent values and thus act according to multiple logics. It highlights many areas in which further robust academic research is needed to guide developments of hybrid organizations in policy and practice.

Research limitations/implications – This paper provides academics, regulators and decision makers with relevant insights into issues and aspects of accounting, PM and accountability in hybrid organizations that need further theoretical development and empirical evidence to help inform improvements in policy and practice.

The authors are grateful for comments and critiques from anonymous *AAAJ* reviewers and *AAAJ* editor, James Guthrie. The views and conclusions expressed within remain the responsibility of the authors.



Originality/value – The paper provides the growing number of academic researchers in this emerging area with a literature review and agenda upon which they can build their research.

Keywords Performance measurement, Accountability, Accounting, Hybridization, Knowledge-intensive public organizations

Paper type Literature review

Knowledge-
intensive
public
organizations

1. Introduction

Western countries face the challenge of organizing public services efficiently and in a customer-oriented manner. As the elderly population increases, the public sector faces financial and capacity-related challenges, prompting the need for efficiency and effectiveness in healthcare and in public services in general. Lately, in the media as well as in political and scholarly debates, particular attention has been paid to the efficiency of public knowledge-intensive services. In the western world, public knowledge-intensive services, such as education and healthcare, consume a significant part of countries' national budgets. In addition to this financial pressure, the current debate about reforms in public knowledge-intensive services is ideological and political, as shown in the articles selected for review in this special issue of *Accounting, Auditing and Accountability Journal (AAAJ)*.

The focus of this *AAAJ* special issue is knowledge-intensive public organizations (KIPOs). KIPOs are organizations that offer knowledge-intensive expert services to create public value (Bos-Nehles *et al.*, 2017). Because KIPOs largely involve the transfer of knowledge-intensive services, these organizations need to process knowledge effectively (Richards and Duxbury, 2014). Classic examples of such organizations are universities and hospitals, in such sectors as education and health and social care. These organizations have various special traits that make them unique but also, in many ways, that complicate the use of accounting and performance measurement (PM). Examples of these traits include professionalism, loose coupling, matrix-type organizing, autonomy and political pressure (Kallio, 2014). Due to the New Public Management (NPM) doctrine and other managerial reforms, the general trend has been to shift public organizations that provide knowledge-intensive services toward adopting private-sector practices (Pollitt and Bouckaert, 2004; Hood, 1995). Private-sector practices and logics, and their imitation by public organizations that provide knowledge-intensive services, vary from full-scale incorporation (Hyvönen *et al.*, 2012), to halfway solutions (Kallio and Kuoppakangas, 2013), to seemingly minor (but potentially significant) changes, such as adopting fashionable, business-minded organizational designs and PM practices (Kallio and Kallio, 2014). The adoption and imitation of private-sector practices have made KIPOs into "hybrid" organizations (Grossi and Thomasson, 2015; Grossi *et al.*, 2017) and created efficiency pressures. These pressures have led, first, into many challenges and, second, into many changes in KIPOs, in aspects such as governance, decision making and accountability. In the quest for productivity, numerous public organizations have adopted some type of hybrid management and organizational form in their operations; thus, it has become common for knowledge-intensive public services (e.g. education, healthcare, security, transport and social services) to be produced by organizations operating at the intersection of the market and the public sector. "Hybridization," in this context, refers to those interorganizational structure, roles, work practices, knowledge and management systems that operate in the gray area between the public and private sectors, and that must therefore combine potentially conflicting goals and values related to different institutional logics (Battilana and Lee, 2014).

As an instrument of innovation, hybrid governance models (e.g. purchaser-provider models, contracting out, outsourcing, corporatization and public and private partnerships) bring about both new challenges and solutions for the accounting, PM and accountability challenges of KIPOs (Almquist *et al.*, 2013; Nowotny *et al.*, 2001). Traditional publicly offered/owned services, such as education, healthcare, transport and social services, despite

Q3

Q4

being under public ownership, are forced to act in a business-like manner, which creates particular problems in accounting, PM and accountability (e.g. Parker, 2011; Habersam *et al.*, 2013; Kallio and Kallio, 2014). In adopting hybrid governance models, KIPOs face increasing pressure to prove their efficiency and to provide responsive service delivery. In particular, our call for papers focuses on accounting and PM challenges that are determined by the combination of private and public management cultures in hybrid KIPOs (e.g. the “leaking” of public money, unfair competition, equal access, public value and accountability).

In this special issue of *AAAJ*, there are four original articles responding this call. The first article, by Gustav Kastberg and Christian Lagström (2019), aims at generating knowledge about KIPOs through a conceptualization of the relationship between hybrid organizing and the actual organization. This aim is stated to assist in increasing our knowledge about how and why hybridization takes place or de-hybridization occurs. The paper is based on a longitudinal qualitative case study of an attempt to introduce cost-benefit calculations as a management initiative, in order to apply methods and carry out projects that would pay off in the future through significantly lowering costs in the social sector. A main contribution of the paper is an explanation about how hybridization must be understood and acted upon in relation to a complex task at hand for the investigated organization. By applying framing theory, the paper delivers a so-called core observation about how complexity is “escaped” (i.e. reduced) by either intensive framing or by a compartmentalization process in which structures and certain kinds of boundaries are created. In the case of framing, the process leads either to what the authors call a “disciplined hybrid” that permits efficient action or to a “hot and contested” situation that is characterized by inertia – that is, a situation with a high level of inactivity. In the case of compartmentalization, the process presupposes less complexity with the potential of full de-hybridization, resulting in a failure to deal with the complex task at hand.

The second article, by Florian Gebreiter and Nunung Hidayah (2019), examines the competing accountability pressures at an English business school and, importantly, how individual teachers in these now-hybrid organizations manage the competing institutional demands of commercialization and professionalism. The article also explores how the individual lecturers responded to these demands. A single-case study at a business school demonstrates that the lecturers have developed four different responses to institutional pressures: compliance, defiance, combination and compartmentalization. The article highlights the unintended consequences of citizen accountability mechanisms. In this case, it was found that student satisfaction surveys have potentially detrimental effects on the students’ learning and the lecturers’ teaching. Historically, public-sector professionals such as university teachers have had great autonomy within their work; consequently, they were trusted to run KIPOs in the best interest of their users. Along with removing the recruiting caps from universities, students were positioned as the customers of universities, thus making universities increasingly hybrid organizations, as the commercial- and public-sector logics became blurred in the process.

The third article, by Dorota Dobija, Anna Górka, Giuseppe Grossi and Wojciech Strzelczyk (2019), provides a deeper understanding of the uses and users of a performance measurement system (PMS) in the context of a Polish university. The authors develop an interesting theoretical model combining exogenous factors and endogenous factors related to the different responses of organizations and individual actors (i.e. university managers and academics). Their analysis reveals different attitudes, including resistance to the use of PMSs. In universities with a local focus, the use of PM for rational decision making is generally loosely coupled with reporting performance for external accountability purposes. The internal use of PM can also be symbolic. PM uses and users are discussed in the specific context of the higher education system in a transitional context (i.e. Poland) in Central and Eastern Europe. The authors perform a comparative study of four business school cases

and highlight similarities and differences in terms of the uses and users of PM in the context of internationally and locally oriented universities. The paper contributes to the accounting and public management literature, as well as to the theoretical understanding of how PM is used and who its users are in the university context.

The fourth article, by Sonja Wüstemann and Annemarie Conrath-Hargreaves (2019), presents a single-case study of a German higher education institution (HEI) that underwent voluntary reorganization from a public organization into a foundation university. Here, the paper focuses on how multiple logic (i.e. governance and business) and autonomy–dependence tensions shape accounting and accountability practices in the HEI context. Their findings suggest that accounting change that is implemented due to the efforts of internal key players may not be used for operational purposes but only for symbolic ones. Moreover, organizational factors and resource dependence related to the government may make universities more aware of governmental pressures and expectations.

All four articles share the common issues of hybridity, external pressures, multiple institutional logics and complexity. While Dobija *et al.* (2019) and Gebreiter and Hidayah (2019) explore more the diverging responses of individual actors to the external pressures, Kastbeg and Lagström (2019) and Wüstemann and Conrath-Hargreaves (2019) look at the responses on more organizational or institutional levels. As we can see, hybridization in many forms dominates the discussion within these four articles. Moreover, although KIPOs comprise many different organizations, the submissions for the special issue indicated that, above all other organizations, there is major interest among scholars about accounting, PM and accountability changes in universities. We suspect this is due to the fact that universities represent a classic case of a KIPO. Based on the submissions received, it is our expectation that there will be an expansion of these themes in the coming years within the domain of interdisciplinary and multidisciplinary accounting studies.

In Section 2 of this paper, we provide a review of the literature on accounting, PM and accountability issues in two relevant KIPOs: universities and healthcare organizations. In so doing, we wish to gather important scholarly contributions under the umbrella of accounting, PM and accountability in KIPOs. In Section 3, we address the growing demand of different forms of hybridity in KIPOs. We end this commentary with Section 4 by connecting the themes of the articles published in this *AAAJ* special issue with the earlier literature and, from there, draw conclusions and give ideas for future research agendas[1].

2. Research method: literature review of accounting and accountability changes in KIPOs

There are many interesting scholarly articles dealing with different aspects of KIPOs, spread throughout different disciplines and journals. As such, the task of gathering and reviewing the literature on accounting, PM and accountability changes in KIPOs was not easy. This stems from the interdisciplinary nature of these phenomena. Moreover, KIPOs as organizations vary. Thus, in order to gain an understanding of the current research in this field, we have reviewed various studies dealing with KIPOs. To view the phenomenon from a wide range of angles, we used a variety of research criteria connected to accounting and accountability issues in KIPOs. Within the field of education, our enquiry focused on universities; we also covered the healthcare sector and, finally, addressed the hybridization trends within KIPOs.

Because the focus of this *AAAJ* special issue is on the intersection of two phenomena – namely, the accounting, PM and the accountability issues of knowledge-intensive public services – we started the analysis by examining the most typical examples of KIPOs: educational organizations (i.e. universities and schools) and healthcare organizations. This task was not straightforward, as KIPO research is spread across a wide range of outlets and disciplines. To better understand the scholarly interest in the accounting and accountability changes taking place in KIPOs, we assessed the range of

articles published within the intersection of the two domains of interest in this study: accounting and accountability, and KIPOs and services. Due to the widespread nature of the literature, we had to use different types of search and inclusion criteria in each domain. When it comes to higher education, the literature of accounting and accountability is spread across different disciplinary domains. Therefore, we started with a simple systematic literature review with Scopus. After that, we widened the scope of our review according to our own knowledge of literature outside the systematic search. In case of the literature on accounting and accountability in healthcare organizations, the scholarly articles are abundant. Therefore, we first narrowed down the search, *a priori* restricting our analysis to five leading journals, and using the Google Scholar query present in the Publish or Perish (PoP) software. Based on an overview of these journals, we could identify the top-cited influential papers on healthcare with a systematic search. Finally, in the analysis, in order to elucidate our findings, we also supported our analysis by referring to various other articles.

2.1 Research on accounting and accountability in universities

A review of the recent literature revealed that, during the last 15 years, there has been an increase in scholarly interest in the accounting and accountability issues in universities. In particular, we sought to determine the various aspects and themes in focus within the interdisciplinary accounting-related research agenda. As the studied issues are multidisciplinary or interdisciplinary by nature, a simple systematic literature review with Scopus using the keywords “university” and “accounting” or “accountability” yielded 134 articles. However, many of these articles assessed the accounting and accountability issues of universities either implicitly only or not at all, and thus were omitted from our final review. They addressed issues such as accounting education, accounting history, university rankings, methodological issues (see, e.g. Brown and Brignall, 2007), or themes not related to accounting or the accountability of universities at all. Of the 134 reviewed articles, only 16 specifically dealt with accounting and accountability issues in universities. Therefore, we widened the scope of our review according to our own knowledge of such literature outside the systematic search. This added 19 articles to the list, for a total of 35 articles dealing with accounting and accountability issues in universities.

Regarding the interdisciplinarity of these studies, we found that among the selected 35 articles, 22 were published in accounting journals, with the rest being published in other journals, such as interdisciplinary journals on organizations or public administration journals. It must be noted that we did not consider articles in accounting and management/public management journals empirically dealing only with non-financial reporting issues (e.g. sustainability reporting, intellectual capital disclosure or gender reporting) in this review because we wanted to address the special traits of KIPOs as organizations, not different empirical enquiries on reporting issues.

The analysis of the literature, from here on, was executed in a qualitative way, analyzing the subject matter of each study. In our analysis, we grouped the articles of universities into three categories. The first category consisted of articles dealing with dual pressures, such as the interplay between local and global steering, tensions between corporate and collegial cultures, the interplay between the preparers and users of accounting changes and tensions created by universities’ managerialization and modernization agendas. In our analysis, a total of 15 articles dealt with these dual pressures. The second category contained articles that addressed PM and PMSs in universities and consisted of ten articles. The third category consisted of articles that addressed more traditional accounting research agendas, such as budgetary reforms and changes in universities’ accounting systems. A total of ten articles dealt with these traditional accounting research agendas.

The first category included works from accounting and organization journals that examined accounting and accountability issues in universities from the perspective of dual

pressures. The first of these dualities – the interplay between the local and global steering of universities – was examined by Boitier and Rivière (2013), in their case study from France looking at how formal management control and systems contribute to the construction of PMSs in universities. They concluded that the social context has a determining influence on universities via values and norms coming from formal management control systems (MCSs). Moreover, political interactions and conflicts of values in universities lead to uncertain outcomes. Parker and Guthrie (2010) also explored the global steering of universities from the perspective of the impact of globalization and “marketization” on universities and on the future of business schools within universities.

The second set of dual pressures – tensions between corporate and collegial cultures – has been studied by Christopher (2012a) in Australia finding that tension exists between the traditional collegial and autonomous management cultures, driven by pressure for more accounting and accountability. Christopher concluded that, despite the shift toward a corporate culture, aspects of collegial and autonomous practices continue to exist in Australian universities. Sae’b Jarrar *et al.* (2006) looked at the interplay between the preparers and users of an accounting change by empirically examining the implementation of activity-based costing at a major Australian university. They found a positive association between successful implementation and the involvement and support of senior management.

Finally, in the fourth set of dual pressures, majority of the articles addressed the tensions between “old” and “new” cultures in universities, such as corporatization (Parker and Guthrie, 2005), “McDonaldisation” (Parker and Jary, 1995), marketization (Czarniawska and Genell, 2002; Guthrie and Neumann, 2007; Parker, 2002) and managerialism (Churchman, 2002; Roberts, 2004). The article by Coy and Pratt (1998) can be seen as an early attempt to understand accountability issues related to the modernization agenda; this article describes the management and organization reforms in New Zealand’s public sector and explores political influences on annual reporting by universities in the context of developing accountability. In more detail, Parker and Guthrie (2005) explored the rapidly changing context affecting universities and their research communities, as well as the effects of university corporatization on research and teaching. Parker and Jary (1995) named the phenomenon of the weakening of professional control structures and intensification of professional labor the “McDonaldization” of society, and concluded that changes in the political, institutional and funding environment of universities increase the power of management and diminish the autonomy of academics.

In a similar vein, Czarniawska and Genell (2002) referred to the change in universities as marketization and concluded that quality assurance, evaluations and rankings are the procedures that universities in Western Europe and in the countries of the former Eastern Bloc have adopted in order to face competition from other knowledge producers. Similarly, Guthrie and Neumann (2007) studied marketization by exploring the intended and unintended consequences of the contemporary performance-driven environment in Australian universities. They argued that the establishment of a performance-driven, market-oriented university system in Australia has created a context in which performance indicators have become dominant. In addition, Parker (2002) critically examined the changes brought about by marketization and revealed an array of globalized disturbances that have directly affected university design archetypes. Churchman (2002) and Roberts (2004) called these aforementioned changes the “corporatising of academia.” Churchman (2002) explored the ways in which academics make sense of their roles in an Australian university, concluding that in attempting to change the university into a more profitable player in the international field, decision makers have simultaneously “opted for strategies which attempt to homogenise a body of academics” (p. 643). Roberts (2004) studied a similar phenomenon in American universities and stated that many in the US academic accounting profession seem to believe in marketization as “enlightenment” and dismiss the market critique. Roberts (2004) further

found that managerialism is something that invades academia and threatens the basic academic freedom of scholars. Parker (2014) continued this story of a change in management by focusing on a European business school and describing an “earth-shattering” change program. He concluded that, in many cases, academics are incapable of preventing their own institutions from changing around them. In addition, Caruana *et al.* (1998), Chandler *et al.* (2002) and Christopher (2012b) studied managerialism in modern universities.

The increase in PM seems to be prominent in the university sector and is a consequence of reforms, such as corporatization, “McDonaldization,” marketization, managerialization and modernization, as explained above.

The second category in our analysis thus addresses issues of PM in universities. In our reviewed articles, these studies are labeled either under PM changes (e.g. Alach, 2017; Modell, 2003, 2005, 2006; ter Bogt and Scapens, 2012; Agyemang and Broadbent, 2015; Broadbent, 2007; Kallio *et al.*, 2016) or under changes in MCSs (Broadbent, 2007; Agyemang and Broadbent, 2015). Many of these studies contribute to debates about the dysfunctional impacts of the use of new performance measures to manage universities.

Discussions on institutional pressures created by MCSs continued through the 2000s and 2010s. For instance, Broadbent (2007) stated, “if you can’t measure it, you can’t manage it,” which, in her opinion, “has intertwined with a host of other concerns and neuroses that affect present-day life” (p. 193) in UK universities. As an academic manager, she explored management and governance in UK HEIs and concluded that the use of an MCS alone is too blunt a tool for the management of universities. In addition, ter Bogt and Scapens (2012) studied the transition to more quantitative PM systems through a case study in the accounting and finance groups of two European universities. They stated that an increasing use of judgmental forms of performance evaluation and, in particular, the use of more quantitative performance measures, have various effects; although these systems emphasize objective, quantitative measures, they create uncertainty and anxiety within academics. These scholars conclude that these PM systems can inhibit creativity in teaching and innovation in accounting research. Similarly, Agyemang and Broadbent (2015) examined the university MCSs that were developed to manage research within UK university business and management schools. They analyzed how universities develop their internal MCS in response to an externally imposed regulatory system and found that internal MCSs developed by academics themselves amplify the controls imposed by the regulatory system. Moreover, these internal control systems were accepted by academics, even though they dilute previously held academic values. In a similar vein, Kallio *et al.* (2016) studied performance management and its consequences in Finnish universities. They concluded that performance management can be seen as a catalyst for changing the ethos of what it is to be an academic and to do academic work[2].

The third category of articles analyzed is informed by more traditional accounting research agendas, such as budgetary reforms (Edwards *et al.*, 2005; Covaleski and Dirsmith, 1988), and changes in the accounting systems of universities (Parker, 2014; Christiaens and De Wielemaker, 2003; Edwards *et al.*, 1999, 2005; Upping and Oliver, 2012). This category also includes various other issues not included in the first two categories, such as strategic management accounting (Hutaibat *et al.*, 2011) and reporting and disclosure issues (Ntim *et al.*, 2017).

The studies on budgetary reforms and the studies on changes in university accounting systems have a common denominator: a larger change taking place in country-level policies. Covaleski and Dirsmith (1988) used a case study to analyze of universities’ accounting systems and their changes. They used an institutional theory framework and examined how, by whom and for what purposes societal expectations of acceptable budgetary practices are articulated, enforced and modified.

Moreover, Edwards *et al.* (1999) researched the processes structuring the emphasis upon budgeting and accounting in universities in the UK from a basis of the ideas of

managerialism and economic rationality. They concluded with criticism of the colonization of accounting in the education sector and called for more research in “understanding and researching the effects and consequences of accounting systems in the new public sector” (p. 496). Edwards *et al.* (2005) continued the research on educational budgetary reforms by exploring why local education authorities in the UK have survived despite the hostile environment. These scholars analyzed the survival strategies of local education authorities over time and concluded that a historical perspective can offer an understanding of the institutional context by focusing on changes over time and generating insights on how organizations behave and develop. Finally, Power (2015) studied the impact of research and its accounting in universities in the UK, exploring the conditions under which new accounting systems begin and the unfolding dynamics through which vague performance objectives become operational. He argued that accounting never simply begins; rather, it has multiple conditions that align as drivers for change at both the field and organizational levels. He also stressed the importance of managerial infrastructures during accounting origination. These aforementioned studies have influenced how university accounting and accountability changes have subsequently been studied by scholars[3].

Q6

Many of the articles in our review offer interesting insights into the challenges the fast changes in the operating logics of universities have caused. Most of these studies have been conducted in the UK, Australia or New Zealand, deriving from the fact that these countries have been the forerunners in introducing and implementing different accountability and accounting reforms into their higher education sectors. It is no wonder the dual pressures, university PM and accounting reforms have gained scholarly interest. Even though they are often treated in an unproblematic way, the concepts of public-sector performance, productivity, efficiency and effectiveness are far from unambiguous, especially in the case of universities (Kallio and Kallio, 2014; Kallio *et al.*, 2016, 2017).

Recent changes – such as changes to quality assurance systems, research and education excellence frameworks and accreditation requirements – have ensured that the introduction of market-driven mechanisms into hybrid universities still represents a research agenda. The new accounting models of accountability have introduced new internal relations of power between academics and managers, altering historically established roles and equilibria. The effects of audit culture (Shore and Wright, 1999, 2008, 2015a, b; Power, 2003) and calculative technologies (Power, 2004; see also Broadbent, 2007) on academics, managers and other university stakeholders are still significantly under-investigated from accounting and accountability perspectives. As Parker (2002) states, the commercial values are changing the universities’ governance, accountability, decision making and communication, and based on this special issue, the *AAAJ* scholars continue their interest in these topics (see Parker and Guthrie, 2005). In similar vein, Power (2015, p. 53) states that “an accounting system intended to neutrally reveal the facts of impact is set on a path to constitute not only the operational meaning of impact but also to radically reshape the mission and routines of the higher education organization as a totality.” The path of rankings, accreditations, quality assurance and frameworks for excellence universities around the globe have taken will ensure that there remains a scholarly interest in university organizations also in the future (see Guthrie and Neumann, 2007; Parker and Guthrie, 2010). In addition, with the rapid and recent developments in university policies, funding and PMSs in Europe and in Asia (taking after Australia, New Zealand and the UK), we suspect that academic endeavors into the accounting and accountability changes of universities will be extended.

Q7

2.2 Accounting and accountability in the healthcare sector

Accounting and accountability issues within the healthcare sector comprise a broad area. In our review of relevant literature in the healthcare sector, we needed to narrow down the search, as we would otherwise have had to examine several hundred papers, which would

have over-balanced the number of manuscripts reviewed in the preceding research field. To narrow the search, we decided to restrict our analysis to the following five journals, listed under “accounting” in the Academic Journal Guide (2018), at Levels 3 or 4: *AAAJ*; *Accounting, Organizations and Society*; *Critical Perspectives on Accounting (CPA)*; *Financial Accountability and Management (FAM)*; and *Management Accounting Research (MAR)*. This decision was motivated by the observation that most of the contributions/conversations in the existing literature have appeared in the aforementioned journals. Nevertheless, we acknowledge that publications on accounting and accountability related to healthcare have also appeared (on a non-continuous basis) in other journals, such as *Abacus*, *Accounting Horizons*, *British Accounting Review*, *Contemporary Accounting Research* and *European Accounting Review*. Similarly, when constructing our healthcare-related analysis of accounting and accountability in KIPOs, we did not consider public-sector journals that fall outside of the boundaries of the cluster of accounting journals; thus, we *a priori* excluded leading journals that surely contain contributions on healthcare (e.g. *Public Management Review* and *Health Policy*).

Based on an overview of the five above-mentioned journals, we initially identified the top-cited influential papers on healthcare. To do so, as recalled earlier, we started with a search using the Google Scholar query present in the PoP software, applying it to each of the selected journals. We chose Google Scholar rather than Scopus for this search, as the latter would have excluded most of the papers appearing in one of the five selected journals. We began with a systematic search, triangulating keywords in the appropriate PoP Google Scholar query sections (i.e. Publication/Journal; All of the words; Any of the words). As in the case of the preceding review, we also added articles missing from the list, considering that some manuscripts were either not cited much or were published recently to have benefited from sufficient time to boost citations. Thus, the following considerations are based mainly, but not exclusively, on a list of 60 articles enucleated by the aforementioned five journals.

A brief examination of the literature made it possible to identify the early investigations into accounting and accountability in healthcare organizations and systems, whose first indications appeared during the 1980s. Indeed, whilst Hofstede (1981) already elaborated on ideas in the broad context of management control in public and not-for-profit activities, Bourn and Ezzamel (1986) precisely analyzed issues in costing and budgeting in the UK National Health Service (NHS), promoting specialty costing to compare expenditures and sustain cost-benchmarking. Importantly, at that time it had already been noted that “health care institutions continue to use antiquated cost control systems” (Wood, 1982, p. 62), and crucial issues related to the introduction of MCSs were already identified, as follows:

The central problem is not to provide instruction in the mechanics of management budgeting, whatever precise form that takes; that is a difficult but not insuperable task. The main issue is to do with attitudes towards the general idea of control in the context of clinical freedom. (Bourn and Ezzamel, 1986, p. 69)

In the early 1990s, the NHS in the UK, and other countries, deployed new reforms. Indeed, from that point onwards, a group of seminal contributions appeared in accounting journals, focusing on a broad variety of topics. For instance, Abernethy and Stoelwinder (1990a) provided a discussion on the relationship between organization structure and MCSs, while the same authors (Abernethy and Stoelwinder, 1990b) discussed the interrelations between physicians and resource management in hospitals. In a related manner, Lapsley (1991) outlined the precise features of accounting research in the NHS. Broadbent (1992) and Broadbent *et al.* (1991) critically interpreted recent financial and administrative changes in the NHS, while Abernethy and Stoelwinder (1991) fueled the discussion on budget, goal orientation and sub-unit performance in non-profit hospitals. Preston (1992), along with his work with Preston *et al.* (1992), illustrated the production of management budgeting in the

NHS while – in a parallel manner – Laughlin *et al.* (1992) provided the first discussion on financial and accountability changes in the medical autonomy of general practitioners (GPs).

This conversation in the scholarly community continued with Jones' (1992) portrayal of the development of financial accountability in British acute care hospitals. Covaleski *et al.* (1993) focused on casemix accounting and the diagnosis-related group (DRG) framework, while Chua and Degeling (1993) dealt with the instrumental, moral and aesthetic axes in healthcare. Ezzamel and Willmott (1993) highlighted financial accountability issues in the UK public sector focusing in particular on healthcare, while Lapsley (1994) portrayed the interrelations between budgetary control and market reforms. Lawrence *et al.* (1994) focused on the financial management reform in New Zealand's health sector, while Laughlin *et al.* (1994) unveiled the initial experiences with and effects of financial and administrative changes in GP practices in the UK. Chua and Preston (1994) illustrated several issues connected to accounting, accounting concepts and accounting changes in healthcare, while Van Peursem *et al.* (1995) provided a thorough review of measures and indicators for health management performance. Also, Abernethy and Stoelwinder (1995) investigated the role of professional control in the management of complex healthcare organizations. In this academic debate, Chua's (1995) paper was pivotal importance for subsequent studies, either for the adopted framework inspired by Latour's sociology of translation or for the multiple-case study approach developed to illustrate the ethnography of three Australian public hospitals.

In the following years, some of the literature addressed the general attempts that were underway to introduce specific accounting, accountability, management and control measures and procedures into healthcare organizations and systems. For example, Charpentier and Samuelson (1996) highlighted the effects of new control systems in Swedish healthcare organizations, while Preston *et al.* (1997) focused on the DRG's payment system and the governmental problem of rationing healthcare to the elderly. Also, Abernethy (1996) illustrated the role of accounting and non-accounting controls when physicians must face resource management, while Llewellyn (1997) investigated the purchasing power and polarized professionalism in British medicine. In a related manner, Kurunmäki (1999) portrayed struggles for the redistribution of power and control due to the trade-off between professional and financial capital, and Doolin (1999) depicted rationalization and resistance following the introduction of casemix management to a New Zealand hospital. Shifting from a micro to a macro perspective, Lawrence *et al.* (1997) illuminated the accounting systems and systems of accountability in the New Zealand health sector. Lowe and Doolin (1999) – and Lowe (2000) – explored casemix accounting, while Jacobs (1998) augmented the understanding of the introduction of cost and budget reports into a GP association.

The start of the new millennium witnessed the launch of new research both related to the accounting–clinical interface to deploy control and managerial tools at the level of doctors' hospital practices (e.g. Lapsley, 2001), and related to accounting, financial and management changes. Therein, Broadbent *et al.* (2001) unveiled organizational resistance strategies to deal with unwanted accounting and finance changes, while Broadbent *et al.* (2003) evaluated private finance initiatives (PFIs) in the NHS in the UK. These also attracted critical studies, such as when Shaoul (2005) developed a critical financial analysis of PFIs and Broadbent *et al.* (2008) examined the problem of uncertainty in the PFIs within the UK NHS. There were also examples of studies investigating the linkages between budgets, accounting information and the decision-making processes at both the strategic and operational level (e.g. Nyland and Pettersen, 2004, in a large Norwegian hospital). The UK NHS was also the object of longitudinal examinations by Jones and Mellett (2007), and by Lapsley and Schofield (2009).

The theme of cost-accounting and performance management was further explored in the aftermath of reforms launched at the country level. For instance, Northcott and Llewellyn (2003) focused on the UK's national reference costing system, while Lehtonen (2007) dug further into DRG prospective pricing and casemix accounting. In parallel, Llewellyn and Northcott (2005)

devoted attention to an analysis of the “average hospital” following a major cost-accounting reform in the UK. Relatedly – and in a parallel manner – Pizzini (2006) examined the relationship between cost-system design, managerial evaluations of the relevance and usefulness of cost-data and financial performance in diverse US hospitals.

A new topic emerged on accounting and accountability mechanisms as related to hybridization and legitimation processes in healthcare organizations. In *MAR*, Kurunmäki *et al.* (2003) initially delved into the debate with “Accountingization vs legitimation” in intensive care; in *FAM*, Kurunmäki and Miller (2006) subsequently extended the conversation by examining the calculating self, hybridization and PM. Later, they investigated the “modernizing government” initiatives in the UK, paying particular attention to the “flexibilities” (e.g. integrated provision, pooled budgets) deployed by the 1999 Health Act (Kurunmäki and Miller, 2011). In parallel to these works, Kurunmäki (2004) investigated this topic by providing an analysis of the acquisition of management accounting expertise by medical professionals facing the transformation of a hybrid profession. Among others, *CPA* included an investigation into public–private governmental partnerships for healthcare projects (Acerete *et al.*, 2011).

Despite the emerging literature from the 1990s onwards, there is still a paucity of general research on accounting and healthcare within the borders of accounting journals. Indeed, the absence of healthcare-focused papers on this special issue witnesses the limited number of manuscripts submitted on this topic. Also, the dearth of existing research is a proper signal to stimulate further research. For example, in the future research agenda there is still much to say about accounting and the hybridization (e.g. Kurunmäki and Miller, 2006, 2011), legitimization (e.g. Arnaboldi and Lapsley, 2004; Robbins and Lapsley, 2015) and professionalization (e.g. Pettersen and Solstad, 2014) processes and procedures, and the possibility still exists to build up interdisciplinary investigations on the transformations of clinicians as medical managers in diverse hospital sites (e.g. Kitchener, 2000; Llewellyn, 2001). In a related manner, while most of the cost-accounting literature has been focused on DRG/casemix/standard/reference costing, novel research may address alternative forms of clinical accounting, such as “disease staging” and others, either at a macro or at a micro level. Accounting for full-cost pricing is another under-investigated area of research, which requires novel examinations at the national/regional levels, as is research into the consequences of the introduction of accounting standards (Ellwood, 1996, 2008 being exceptions). The need has also emerged to better study the level of micro-practices (e.g. Ahrens and Chapman, 2007), and focus on rarely investigated healthcare areas – such as pediatric care, the care of the elderly, the care of the disabled and/or mentally disabled, the care of the poor and healthcare in public prisons – while at the same time investigating either public hospitals and public–private partnerships.

Importantly, the globally pressing concern about the rising costs of healthcare (Chapman *et al.*, 2014) and the consequent need to improve efficiency indicates research on the interconnections of accounting and performance management and PMSs (e.g. Veronesi *et al.*, 2014; Gebreiter and Ferry, 2016; Lachmann *et al.*, 2016). Moreover, following the examination of Eldenburg *et al.* (2010), there is still much to learn about the behavioral consequences deriving from the introduction of precise accounting techniques in healthcare – such as ABC – and others. In a related manner, it has been reported that in the last few years, a novel set of accounting and costing practices has been launched in the healthcare environment (Chapman and Kern, 2010), thus experimenting with the patient-level information and costing system (PLICS) (e.g. Blunt and Bardsley, 2012; Ellwood *et al.*, 2015) or service-line reporting (SLR). Considering the mimetic behavior that diverse countries adopt to adapt reforms and accounting–clinical information systems experimented with elsewhere (e.g. mainly but not only borrowed from Australia, the UK and the USA), it would not be surprising to envisage in the near future further studies on the application of new

patient-centered accounting information techniques – such as the aforementioned PLICS – as well as on new PM and reporting systems – such as SLR for individual service lines (e.g. cardiology, see www.monitor-nhsft.gov.uk) or in high-cost areas in hospitals (e.g. Szczesny and Ernst, 2016). Considering the increasing number of natural disasters and epidemics, the need for research on accounting, accountability and PMSs should also be addressed in terms of healthcare infrastructures devoted to the relief of human beings after disasters (e.g. Sargiacomo, 2015) and global pandemics (e.g. Neu *et al.*, 2010).

The adoption of new theoretical frameworks and methodological approaches is also encouraged. For instance, Latour's theoretical underpinning has seen sustained use, for example in Chua (1995), Preston *et al.* (1992) and Kastberg and Siverbo (2016). In contrast, Covaleski *et al.* (1993) used institutional theory; Broadbent *et al.* (1991) preferred Habermas' critical theory, and in particular the notion of internal colonization; and Llewellyn and Northcott (2005) built their investigation on Fairclough's critical discourse analysis. Preston *et al.* (1997) used Foucauldian governmentality literature, whilst Kurunmäki (1999) applied the conceptual tools of the French sociologist Pierre Bourdieu, and in particular the notion of field and capital. More recently, Pflueger (2016) built the research on the changing margins of accounting, basing the analysis on genealogical studies of accounting and anthropological studies of "things." Interpretative critical analyses have, however, been conducted in the literature, such as that adopted by Jones and Dewing (1997), as have quantitative analyses (e.g. Abernethy and Vagnoni, 2004). Thus, novel theoretical underpinnings and qualitative–quantitative methods are invited, as are new comparative international accounting investigations, considering the paucity of them in the seminal literature (notable exceptions are: Jacobs, 2005; Jacobs *et al.*, 2004; Scarparo, 2006).

Finally, our literature reviewed covers a wide range of papers on accounting and financial management in the healthcare sectors of several English-speaking countries, namely, the USA, Canada, the UK, Australia and New Zealand. However, there has been a tendency to augment this literature with continuous explorations of other countries, such as Spain (e.g. Purdy and Gago, 2007, 2009; Acerete *et al.*, 2011); Italy (e.g. Macinati, 2010; Bracci and Llewellyn, 2012; Campanale and Cinquini, 2016). Therein, considering the concentration of papers on Anglo-Saxon countries, there is still much to learn about several hitherto neglected countries, including, but not limited to, countries located in Eastern Europe, Africa, Asia and South America, thus moving outside the boundaries of Anglophone scenarios and of continental Europe.

3. The increasing hybridization of KIPOs

It is evident from the previous literature reviews that all different kinds of KIPOs (e.g. universities and healthcare organizations) are becoming hybrid organizations as a result of the combination of two or more elements that are normally found separately. Hybridization, in itself, is a process that can assume various forms, such as an ownership structure (mixed ownership, as in public–private partnerships); goal incongruence and competing institutional logics (these are quite common in different kinds of KIPOs operating between state and market logics); multiple sources of funding (i.e. public and private, or mixed); and different forms of control mechanisms and audit systems (e.g. regulatory control of the market, professional control, consumer control) (Grossi *et al.*, 2017; Johanson and Vakkuri, 2018).

Hybrid organizations have been investigated by organizational scholars and by public management scholars (Battilana *et al.*, 2012; Battilana and Lee, 2014). However, the accounting literature still contains few studies that focus on accounting and accountability changes in hybrid organizations (Miller *et al.*, 2008). Billis (2010) defines "hybrid organizations" as those that borrow components and logics from two sectors or actors: the public sector and the private-for-profit sector (Billis, 2010; Koppell, 2003). The definition of "hybrid organizations"

as combinations of elements brings with it a direct link to complexity. Johanson and Vakkuri (2018) refer to “complex institutional settings” as those in which public and private owners may cooperate according to public interest or the specific activity, or in which private (for-profit or non-profit) entities increasingly take over the provision of public services. Organizational forms and processes have been hybridized as organizational boundaries have become increasingly blurred (Broadbent and Guthrie, 2008). Different organizational structures can therefore result, with varying governance models and processes (e.g. hierarchy, market mechanisms and/or networks) (Grossi *et al.*, 2017). Weisel and Modell (2014) reported that the hybridization of the model of governance of organizations is contingent on the alignment of diverse interests and logics. Battilana and Lee (2014) focused on the multidimensional characteristics of hybridity, such as hybrid identities, hybrid organizational forms and the coexistence of multiple institutional logics. Through these characteristics, they found that actors, entities, objects, practices, processes and bodies of expertise can be hybridized. The articles of the AAAJ special issue focus on different organizational forms of hybrid organizations (i.e. social investing funding, business schools and foundation universities) operating in different fields (i.e. social care and higher education). In the public sector, and also in the case of KIPOs, hybridization has affected not only organizational forms but also accounting and PM practices and accountability mechanisms.

In terms of the hybridization of accounting, Hopwood (1996) argued that the focus is frequently on hierarchical relationships and vertical information flows, while lateral information flows are neglected. He recognized a research gap in the management accounting literature and suggested that management accounting can support joint actions within a network and that a network is more successful when it processes information more laterally. Thus, accounting can be hybridized instead of remaining a calculative process. However, accounting has continually developed and been changed by calculative practices and other forms of expertise (Miller, 1998). Accounting practices have also been hybridized, with an increased incorporation of a mix of principles from other disciplines, resulting in NPM and New Public Governance (NPG) transformation (Miller *et al.*, 2008). NPM represents a “command and control” method of using accounting information. In contrast, NPG encourages the use of accounting information to support debate and dialogue processes among different partners with different competencies and work practices, who are dependent on each other, but not in a hierarchical sense (Almquist *et al.*, 2013). In the context of German universities, the article by Wüstermann and Conrath-Hargreaves (2019) focuses on how the increased financial autonomy from state grants and the corporatization of universities, influenced by national reforms, has affected their accounting practices.

In the case of hybrid organizations, the accountability relationship between the “accountors” and “accountees” can also be hybrid and does not comply with the traditional vertical accountability mechanisms. The question of who is accountable to whom is further complicated when the relationships between politicians, citizens, customers and hybrid providers of public services are altered (Grossi and Thomasson, 2015). In the case of hybrid organizations, the focus shifts away from the vertical relationship between elected politicians and citizens and toward more horizontal relationships between politicians and managers and a customer relationship between citizens and hybrid organizations (Humphrey *et al.*, 1993; Shaoul *et al.*, 2012). In the case of hybrid settings, the boundaries of accountors (often a mix of public and private actors) are fluid and dynamic, and accountability mechanisms are more lateral than vertical (Hopwood, 1996). The accountees are usually in a position of power to demand answers from the accountors that are numerous, and have different expectations regarding the information content of the accountees (Johanson and Vakkuri, 2018). In the case of hybrid organizations, independent evaluators, boards of stakeholders, mass media, interest groups and clients can all act as horizontal accountees. In this case, it is difficult to meet external and internal stakeholders’ accountability needs with, for example, PMSs, because

they may have different interests and attitudes (Kurunmäki and Miller, 2006). In the context of a British business school, the article of Gebreiter and Hidayah (2019) shows hybrid accountability related to the multiple responses of individual teachers in relation to the competing institutional demands of different accountees (customers and national agencies) of commercialization and professionalism.

Another relevant issue that has emerged is the question of what hybrid organizations are to be held accountable for (Grossi and Thomasson, 2015). Hybrid organizations operate partly in the market and partly in the public sector. In the market, accountability is based on market mechanisms that focus mainly on financial performance and not on the creation of public and democratic values, which is the focus of public sector services (Shaoul *et al.*, 2012). The development of PMSs is complicated because different partners (public and private) may have multiple values and may thus interpret the organizational mission quite differently (Thornton *et al.*, 2012). The public sector intends to create value for society, taxpayers and the public. The private (business) sector needs to create value for two important stakeholders: customers and owners (Johanson and Vakkuri, 2018). In the case of KIPOs (e.g. universities and healthcare organizations), the customer may not be the best party to evaluate the quality of the service received; in fact, a strong emphasis on the customer may even have a dysfunctional effect on professionals (Gebreiter and Hidayah, 2019). This makes hybrid organizations complicated venues for understanding, quantifying, valuing and demonstrating results (Hyndman and McConville, 2018). Quantification involves discussion about things that are to be measured (e.g. performance, efficiency or effectiveness), and quantification occurs in terms of available data. Notions of performance are influenced by the calculative device used (Johanson and Vakkuri, 2018). Thus, PMSs are never neutral about the uses and users of calculative devices (Vakkuri, 2010; Miller and Rose, 2008). The article of Dobija *et al.* (2019) shows different attitudes about the rational use of PMSs, along with the resistance by internal university actors (managers and academics) to their use. In some KIPOs (such as universities), the use of PMSs for rational decision making is generally loosely coupled with the need to use reporting performance for external accountability purposes.

We can conclude that the hybridity of KIPOs is evident not only in the use of different ownership models that have diverging goals and logics but also in the use of hybrid governance models, accounting practices and accountability mechanisms. This trend is evident in the articles included in this special issue that deal with different forms of hybridization and their impact on accounting, PM and accountability in different knowledge-intensive organizations and services (e.g. higher education and healthcare) and in different contexts within Europe (i.e. Germany, Poland, Sweden and the UK).

4. Conclusions and future research agenda

Our call for papers has provided us with a group of interesting studies, especially with regard to the accounting, PM and accountability issues of KIPOs. The common themes of the four papers surviving the review process, focusing on accounting, PMS and accountability changes in KIPOs are hybridity, dual pressures, multiple logics and complexity (Dobija *et al.*, 2019; Gebreiter and Hidayah, 2019; Kastbeg and Lagström, 2019; Wüstermann and Conrath-Hargreaves, 2019). These themes are, however, differently investigated and related to in the four papers. The empirical scenes were brought from two different contexts in four different countries: universities/business schools in the UK, Germany and Poland and the social sector in Sweden. It is also evident that these common denominators, in many ways, relate to the themes identified in the earlier studies, presented in the literature review on universities and healthcare organizations.

Our attempt to capture KIPOs as a single group of organizations struggling with similar pressures proved to be rather difficult from the perspective of a literature review. This was due

to the widespread interdisciplinary nature of the accounting, PM and accountability research into KIPOs. We therefore choose to focus our review on the two groups of organizations that were included in the special issue – namely, universities and healthcare organizations.

The analysis and results of the literature review on accounting and accountability changes in universities were grouped into the following categories and sub-categories: dual pressures, and specifically the interplay between local and global steering, tensions between corporate and collegial cultures, the interplay between the preparers and users of accounting changes and tensions created by universities' managerialization and modernization agendas; PM and management systems in universities; and traditional accounting research agendas, such as budgetary reforms and accounting changes in universities' accounting systems. Many of the articles in our review offered interesting insight into the effects of the fast changes in the operating logics of universities. A great deal of these studies were conducted in the UK, Australia or New Zealand, deriving from the fact that these countries have been the forerunners in implementing different accountability and accounting reforms into their higher education sectors.

The accounting and accountability issues of the healthcare sector comprised a broad area to be examined, and the scholarly articles related to the healthcare sector and relevant issues of accounting, PMSs and accountability are abundant, spanning the past four decades. While the university studies mainly began to appear in the 1990s and 2000s, the accounting-related healthcare papers began to appear in the 1980s. By the 1990s, the introduction of specific accounting, accountability, management and control measures and procedures in healthcare organizations and systems came into focus. The launch of new research around the accounting-clinical interface to deploy control and managerial tools at the level of doctors' hospital practices and around accounting, financial and management changes was evident in the early 2000s. The theme of cost-accounting and performance management was then further explored in the aftermath of reforms launched at different country levels. A topic gained interest in the 2000s: accounting and accountability mechanisms as related to the hybridization and legitimization processes in healthcare organizations.

Previous research on KIPOs as hybrid organizations has stated that the development of accounting tools is complex, as different actors may have divergent values and thus interpret the organizational mission differently. As such, hybrid organizations are complicated venues for understanding, valuing and demonstrating performance (Hyndman and McConville, 2018). There is still an important research gap concerning the role and impact of hybridity and hybrid organizations on the design, strategies, value creation, measurement and evaluation of modern organizations and service delivery systems (Grossi *et al.*, 2017). Furthermore, there is a need in accounting research for further theorization on the role of individual actors in the design, implementation and use of accounting tools and performance evaluations in hybrid organizations (Berry *et al.*, 2009).

Previous scholars identified several reasons related to the ambiguities in measuring performance in hybrid organizations (Johanson and Vakkuri, 2018): for instance, ambiguities in focusing on relevant areas of PM in hybrid contexts, ambiguities in understanding the cause-and-effect relationship of complex policy activities; constraints in the recording and data systems of hybrid activities; and ambiguities in communicating for and about the performance of hybrids. Furthermore, there is a need in accounting research for further theorization on the different ambiguities related to measuring and communicating performance in different kinds of knowledge-intensive services and hybrid organizations. With this AAAJ special issue, we call for more research in all the aforementioned KIPOs and in many more, such as security organizations (e.g. police and military forces) and social care organizations, to name just a few. A current trend among one type of public organization that would also be fruitful to study empirically from a KIPO accounting and accountability perspective is the "smart city" (IESE Business School, 2018).

The fact that “smartness” in this public organizational context not only refers to technology development but also to knowledge and governance development makes these initiatives highly relevant from a KIPO perspective (Berrone *et al.*, 2018).

This suggestion for the orientation of future studies also relates to the areas of method and theoretical perspectives used when investigating KIPOs. Future studies would likely benefit from going deeper into the actual practices in order to observe not only from the outside or to make interpretations based on what is written in different formal documents. Our suggestion would therefore be to interact more closely with practitioners in different roles within KIPOs during a longer period of time and use different theoretical lenses in order to not be blinded by possible institutional isomorphism. In this way, new ways of theorizing about KIPOs in a more inductive way would be possible and our knowledge about how accounting and accountability processes in these empirical settings do or do not work would accordingly increase. Studies on KIPOs in regions outside of Europe and Oceania are also generally needed. In addition, it would also be interesting in the future to see more in-depth examination of accounting and accountability issues within KIPOs in general, as a coherent group of organizations. After all, KIPOs share many common denominators in their operating logics, and accounting and accountability studies of these aspects would benefit both researchers and policy makers.

Notes

1. This special issue, “Accounting and accountability changes in KIPOs,” mainly builds on papers that were presented at the *Accounting, Auditing and Accountability Journal (AAAJ)* workshop, which was held at Kozminski University, Warsaw, on May 15-16, 2017.
2. In addition, Melo *et al.* (2010) and Vakkuri and Meklin (2003) addressed PM in universities.
3. In addition to the articles mentioned, our systematic search revealed three studies on traditional accounting change agendas: Christiaens and De Wielemaker (2003), Agasisti *et al.* (2008) and Upping and Oliver (2012).

References

- Abernethy, M.A. (1996), “Physicians and resource management: the role of accounting and non-accounting controls”, *Financial Accountability and Management*, Vol. 12 No. 2, pp. 141-156.
- Abernethy, M.A. and Stoelwinder, J.U. (1990a), “The relationship between organisation structure and management control in hospitals: an elaboration and test of Mintzberg’s professional bureaucracy model”, *Accounting, Auditing & Accountability Journal*, Vol. 3 No. 3, pp. 18-33.
- Abernethy, M.A. and Stoelwinder, J.U. (1990b), “Physicians and resource management in hospitals: an empirical investigation”, *Financial Accountability and Management*, Vol. 6 No. 1, pp. 17-31.
- Abernethy, M.A. and Stoelwinder, J.U. (1991), “Budget use, task uncertainty, system goal orientation and subunit performance: a test of the ‘fit’ hypothesis in not-for-profit hospitals”, *Accounting, Organizations and Society*, Vol. 16 No. 2, pp. 105-120.
- Abernethy, M.A. and Stoelwinder, J.U. (1995), “The role of professional control in the management of complex organizations”, *Accounting, Organizations and Society*, Vol. 20 No. 1, pp. 1-17.
- Abernethy, M.A. and Vagnoni, E. (2004), “Power, organization design and managerial behavior”, *Accounting Organizations and Society*, Vol. 29 Nos 3-4, pp. 207-225.
- Academic Journal Guide (2018), available at: <https://charteredabs.org/academic-journal-guide-2018-available-now/>
- Acerete, B., Stafford, A. and Stapleton, P. (2011), “Spanish healthcare public private partnerships: the ‘Alzira model’”, *Critical Perspectives on Accounting*, Vol. 22 No. 6, pp. 533-549.

- Agasisti, T., Arnaboldi, M. and Azzone, G. (2008), "Strategic management accounting in universities: the Italian experience", *Higher Education*, Vol. 55 No. 1, pp. 1-15.
- Agyemang, G. and Broadbent, J. (2015), "Management control systems and research management in universities: an empirical and conceptual exploration", *Accounting, Auditing & Accountability Journal*, Vol. 28 No. 7, pp. 1018-1046.
- Ahrens, T. and Chapman, C. (2007), "Management accounting as practice", *Accounting, Organizations and Society*, Vol. 32 Nos 1-2, pp. 1-27.
- Alach, Z. (2017), "The use of performance measurement in universities", *International Journal of Public Sector Management*, Vol. 30 No. 2, pp. 102-117.
- Almquist, R., Grossi, G., van Helden, G.J. and Reichard, C. (2013), "Public sector governance and accountability", *Critical Perspectives on Accounting*, Vol. 24 Nos 7-8, pp. 479-487.
- Arnaboldi, M. and Lapsley, I. (2004), "Modern costing innovations and legitimation: a health care study", *Abacus*, Vol. 40 No. 1, pp. 1-20.
- Battilana, J. and Lee, M. (2014), "Advancing research on hybrid organizing – insights from the study of social enterprises", *The Academy of Management Annals*, Vol. 8 No. 1, pp. 397-441.
- Battilana, J., Lee, M., Walker, J. and Dorsey, C. (2012), "In search of hybrid ideal", *Stanford Social Innovation Review*, Vol. 10 No. 3, pp. 51-55.
- Berry, A.J., Coad, A.F., Harris, E.P., Otley, D.T. and Stringer, C. (2009), "Emerging themes in management control: a review of recent literature", *The British Accounting Review*, Vol. 41 No. 1, pp. 2-20.
- Billis, D. (2010), "Towards a theory of hybrid organizations", in Billis, D. (Ed.), *Hybrid Organizations and the Third Sector: Challenges for Practice, Theory and Policy*, Palgrave Macmillan, New York, NY, pp. 46-69.
- Blunt, I. and Bardsley, M. (2012), *Use of Patient-Level Costing to Increase Efficiency in NHS Trusts*, Nuffield Trust, London, available at: www.nuffieldtrust.org.uk/research/patient-level-costing-can-it-yield-efficiency-savings/ (accessed November 12, 2018).
- Boitier, M. and Rivière, A. (2013), "Freedom and responsibility for French universities: from global steering to local management", *Accounting, Auditing & Accountability Journal*, Vol. 26 No. 4, pp. 616-649.
- Bos-Nehles, A., Bondarouk, T. and Nijenhuis, K. (2017), "Innovative work behaviour in knowledge-intensive public sector organizations: the case of supervisors in the Netherlands fire services", *The International Journal of Human Resource Management*, Vol. 28 No. 2, pp. 379-398.
- Bourn, M. and Ezzamel, M. (1986), "Costing and budgeting in the National Health Service", *Financial Accountability and Management*, Vol. 2 No. 1, pp. 53-71.
- Bracci, E. and Llewellyn, S. (2012), "Accounting and accountability in an Italian social care provider: contrasting people-changing with people-processing approaches", *Accounting, Auditing & Accountability Journal*, Vol. 25 No. 5, pp. 806-834.
- Broadbent, J. (1992), "Change in organisations: a case study of the use of accounting information in the NHS", *British Accounting Review*, Vol. 24 No. 4, pp. 343-367.
- Broadbent, J. (2007), "If you can't measure it, how can you manage it? Management and governance in higher educational institutions", *Public Money & Management*, Vol. 27 No. 3, pp. 193-198.
- Broadbent, J. and Guthrie, J. (2008), "Public sector to public services: 20 years of 'contextual' accounting research", *Accounting Auditing and Accountability Journal*, Vol. 21 No. 2, pp. 129-169.
- Broadbent, J., Gill, J. and Laughlin, R. (2003), "Evaluating the private finance initiative in the national health service in the UK", *Accounting, Auditing & Accountability Journal*, Vol. 16 No. 3, pp. 422-445.
- Broadbent, J., Gill, J. and Laughlin, R. (2008), "Identifying and controlling risk: the problem of uncertainty in the private finance initiative in the UK's National Health Service", *Critical Perspectives on Accounting*, Vol. 19 No. 1, pp. 40-78.
- Broadbent, J., Jacobs, K. and Laughlin, R. (2001), "Organisational resistance strategies to unwanted accounting and finance changes: the case of general medical practice in the UK", *Accounting, Auditing & Accountability Journal*, Vol. 14 No. 5, pp. 565-586.

-
- Broadbent, J., Laughlin, R. and Read, S. (1991), "Recent financial and administrative changes in the NHS: a critical theory analysis", *Critical Perspectives on Accounting*, Vol. 2 No. 1, pp. 1-29.
- Brown, R. and Brignall, S. (2007), "Reflections on the use of a dual-methodology research design to evaluate accounting and management practice in UK university central administrative services", *Management Accounting Research*, Vol. 18 No. 1, pp. 32-48.
- Campanale, C. and Cinquini, L. (2016), "Emerging pathways of colonization in healthcare from participative approaches to management accounting", *Critical Perspectives on Accounting*, Vol. 39 No. 4, pp. 59-74.
- Caruana, A., Ramaseshan, B. and Ewing, M.T. (1998), "Do universities that are more market orientated perform better?", *International Journal of Public Sector Management*, Vol. 11 No. 1, pp. 55-70.
- Chandler, J., Barry, J. and Clark, H. (2002), "Stressing academe: the wear and tear of the New Public Management", *Human Relations*, Vol. 55 No. 9, pp. 1051-1069.
- Chapman, C., Kern, A. and Laguecir, A. (2014), "Costing practices in healthcare", *Accounting Horizons*, Vol. 28 No. 2, pp. 353-364.
- Chapman, C.S. and Kern, A. (2010), "Costing in the National Health Service: from reporting to managing", Chartered Institute of Management Accountants, London, available at: https://mafiadoc.com/costing-in-the-national-health-service-from-reporting-to-cima_59ee127e1723dd8632082ed4.html
- Charpentier, C. and Samuelson, L.A. (1996), "Effects of new control systems in Swedish health care organizations", *Financial Accountability & Management*, Vol. 12 No. 2, pp. 157-172.
- Christiaens, J. and De Wielemaker, E. (2003), "Financial accounting reform in Flemish universities: an empirical study of the implementation", *Financial Accountability & Management*, Vol. 19 No. 12, pp. 185-204.
- Christopher, J. (2012a), "Tension between the corporate and collegial cultures of Australian public universities: the current status", *Critical Perspectives on Accounting*, Vol. 23 No. 78, pp. 556-571.
- Christopher, J. (2012b), "Mapping the changing governance control paradigms of public universities", *Corporate Ownership & Control*, Vol. 10 No. 4, pp. 162-176.
- Chua, W.F. (1995), "Experts, networks and inscriptions in the fabrication of accounting images: a story of the representation of three public hospitals", *Accounting, Organizations and Society*, Vol. 20 No. 2, pp. 111-145.
- Chua, W.F. and Degeling, P. (1993), "Interrogating an accounting-based intervention on three axes: instrumental, moral and aesthetic", *Accounting, Organizations and Society*, Vol. 18 No. 4, pp. 291-318.
- Chua, W.F. and Preston, A. (1994), "Worrying about accounting in health care", *Accounting, Auditing and Accountability Journal*, Vol. 7 No. 3, pp. 4-17.
- Churchman, D. (2002), "Voices of the academy: academic's responses to the corporatizing of academia", *Critical Perspectives on Accounting*, Vol. 13 Nos 5-6, pp. 643-656.
- Covaleski, M.A. and Dirsmith, M.W. (1988), "An institutional perspective on the rise, social transformation and fall of a university budget category", *Administrative Science Quarterly*, Vol. 33 No. 4, pp. 562-587.
- Covaleski, M.A., Dirsmith, M.W. and Michelman, J.E. (1993), "An institutional theory perspective on the DRG framework, case-mix accounting systems and health-care organizations", *Accounting, Organizations and Society*, Vol. 18 No. 1, pp. 65-80.
- Coy, D. and Pratt, M. (1998), "An insight into accountability and politics in universities: a case study", *Accounting, Auditing & Accountability Journal*, Vol. 11 No. 5, pp. 540-561.
- Czarniawska, B. and Genell, K. (2002), "Gone shopping? Universities on their way to the market", *Scandinavian Journal of Management*, Vol. 18 No. 4, pp. 455-474.
- Doolin, B. (1999), "Casemix management in a New Zealand hospital: rationalisation and resistance", *Financial Accountability and Management*, Vol. 15 Nos 3-4, pp. 397-417.

- Edwards, P., Ezzamel, M. and Robson, K. (1999), "Connecting accounting and education in the UK: discourses and rationalities of education reform", *Critical Perspectives on Accounting*, Vol. 10 No. 4, pp. 469-500.
- Edwards, P., Ezzamel, M. and Robson, K. (2005), "Budgetary reforms", *Accounting, Auditing & Accountability Journal*, Vol. 18 No. 6, pp. 733-755.
- Eldenburg, L., Soderstrom, N., Willis, V. and Wu, A. (2010), "Behavioral changes following the collaborative development of an accounting information system", *Accounting, Organizations and Society*, Vol. 35 No. 2, pp. 222-237.
- Ellwood, S. (1996), "Full-cost pricing rules within the national health service internal market-accounting choices and the achievement of productive efficiency", *Management Accounting Research*, Vol. 7 No. 1, pp. 25-51.
- Ellwood, S. (2008), "Accounting for public hospitals: a case study of modified GAAP", *Abacus*, Vol. 44 No. 4, pp. 399-422.
- Ellwood, S., Chambers, N., Llewellyn, S., Begkos, C. and Wood, C. (2015), "Debate: achieving the benefits of patient-level costing – open book or can't look?", *Public Money & Management*, Vol. 35 No. 1, pp. 69-70.
- Ezzamel, M. and Willmott, H. (1993), "Corporate governance and financial accountability: recent reforms in the UK public sector", *Accounting, Auditing & Accountability Journal*, Vol. 6 No. 3, pp. 109-132.
- Gebreiter, F. and Ferry, L. (2016), "Accounting and the 'insoluble' problem of health-care costs", *European Accounting Review*, Vol. 25 No. 4, pp. 719-733.
- Grossi, G. and Thomasson, A. (2015), "Facing the challenges of obtaining accountability in hybrid organizations. The transnational case of Malmö Copenhagen Port", *International Review of Administrative Sciences*, Vol. 81 No. 3, pp. 604-620.
- Grossi, G., Reichard, C., Thomasson, A. and Vakkuri, J. (2017), "Performance measurement of hybrid organizations: emerging issues and future research perspectives", *Public Money and Management*, Vol. 37 No. 6, pp. 379-385.
- Guthrie, J. and Neumann, R. (2007), "Economic and non-financial performance indicators in universities", *Public Management Review*, Vol. 9 No. 2, pp. 231-252.
- Habersam, M., Piber, M. and Skoog, M. (2013), "Knowledge balance sheets in Austrian universities: the implementation, use, and re-shaping of measurement and management practices", *Critical Perspectives on Accounting*, Vol. 24 Nos 4-5, pp. 319-337.
- Hofstede, G. (1981), "Management control of public and not-for-profit activities", *Accounting, Organizations and Society*, Vol. 6 No. 3, pp. 193-211.
- Hood, C. (1995), "Emerging issues in public administration", *Public Administration*, Vol. 73 No. 1, pp. 165-183.
- Hopwood, A.G. (1996), "Looking across rather than up and down: on the need to explore the lateral processing of information", *Accounting, Organization and Society*, Vol. 21 No. 6, pp. 589-590.
- Humphrey, C., Miller, P. and Scapens, R.W. (1993), "Accountability and accountable management in the UK public sector", *Accounting, Auditing and Accountability Journal*, Vol. 6 No. 3, pp. 7-29.
- Hutaibat, K., von Alberti-Alhtaybat, L. and Al-Htaybat, K. (2011), "Strategic management accounting and the strategising mindset in an English higher education institutional context", *Journal of Accounting & Organizational Change*, Vol. 7 No. 4, pp. 358-390.
- Hyndman, N. and McConville, D. (2018), "Trust and accountability in UK charities: exploring the virtuous circle", *The British Accounting Review*, Vol. 50 No. 2, pp. 227-237.
- Hyvönen, T., Järvinen, J., Oulasvirta, L. and Pellinen, J. (2012), "Contracting out municipality accounting: the role of institutional entrepreneurship", *Accounting, Auditing & Accountability Journal*, Vol. 25 No. 6, pp. 944-963.
- IESE Business School (2018), "The smartest cities in the world in 2018", available at: www.forbes.com/sites/iese/2018/07/13/the-smartest-cities-in-the-world-in-2018/#14f381672efc

- Jacobs, K. (1998), "Costing healthcare: a study of the introduction of cost and budget reports into a GP association", *Management Accounting Research*, Vol. 9 No. 1, pp. 55-70.
- Jacobs, K. (2005), "Hybridisation or polarisation: doctors and accounting in UK, Germany and Italy", *Financial Accountability and Management*, Vol. 21 No. 2, pp. 135-152.
- Jacobs, K., Marcon, G. and Witt, D. (2004), "Cost and performance information for doctors: an international comparison", *Management Accounting Research*, Vol. 15 No. 3, pp. 337-354.
- Johanson, J.E. and Vakkuri, J. (2018), *Governing Hybrid Organizations: Exploring Diversity of Institutional Life*, Routledge, London.
- Jones, C.S. (1992), "Developing financial accountability in British acute hospitals", *Financial Accountability and Management*, Vol. 15 No. 1, pp. 1-20.
- Jones, C.S. and Dewing, I.P. (1997), "The attitudes of NHS clinicians and medical managers towards changes in accounting controls", *Financial Accountability and Management*, Vol. 13 No. 3, pp. 261-280.
- Jones, M.J. and Mellett, H.J. (2007), "Determinants of changes in accounting practices: accounting and the UK health service", *Critical Perspectives on Accounting*, Vol. 18 No. 1, pp. 91-121.
- Kallio, K.-M. (2014), "Ketä kiinnostaa tuottaa tutkintoja ja julkaisuja liukuhihnaperiaatteella...? – Suoritusmittauksen vaikutukset tulosohtajattujen yliopistojen tutkimus- ja opetushenkilökunnan työhön", (The effects of performance measurement on the work of academic staff), doctoral thesis, Series A-1, Turku School of Economics Publications, University of Turku.
- Kallio, K.-M. and Kallio, T.J. (2014), "Management-by-results and performance measurement in universities – implications for work motivation", *Studies in Higher Education*, Vol. 39 No. 4, pp. 574-589.
- Kallio, K.-M., Kallio, T.J. and Grossi, G. (2017), "Performance measurement in universities: ambiguities in the use of quality vs quantity in performance indicators", *Public Money & Management*, Vol. 37 No. 4, pp. 293-300.
- Kallio, K.-M., Kallio, T.J., Tienari, J. and Hyvönen, T. (2016), "Ethos at stake: performance management and academic work in universities", *Human Relations*, Vol. 69 No. 3, pp. 685-709.
- Kallio, T.J. and Kuoppakangas, P. (2013), "Bandwagoning municipal enterprises: institutional isomorphism and the search for the third way", *Policy Studies*, Vol. 34 No. 1, pp. 19-35.
- Kastberg, G. and Siverbo, S. (2016), "The role of management accounting and control in making professional organizations horizontal", *Accounting, Auditing & Accountability Journal*, Vol. 29 No. 3, pp. 428-451.
- Kitchener, M. (2000), "The bureaucratization of professional roles: the case of clinical directors in UK hospitals", *Organization*, Vol. 7 No. 1, pp. 129-154.
- Koppell, J.G.S. (2003), *The Politics of Quasi-Government: Hybrid Organizations and the Dynamics of Bureaucratic Control*, Cambridge University Press, Cambridge.
- Kurunmäki, L. (1999), "Professional vs financial capital in the field of health care – struggles for the redistribution of power and control", *Accounting, Organizations and Society*, Vol. 24 No. 2, pp. 95-124.
- Kurunmäki, L. (2004), "A hybrid profession: the acquisition of management accounting expertise by medical professionals", *Accounting, Organizations and Society*, Vol. 29 Nos 3-4, pp. 327-347.
- Kurunmäki, L. and Miller, P. (2006), "Modernising government: the calculating self, hybridisation and performance measurement", *Financial Accountability and Management*, Vol. 22 No. 1, pp. 87-106.
- Kurunmäki, L. and Miller, P. (2011), "Regulatory hybrids: partnerships, budgeting and modernising government", *Management Accounting Research*, Vol. 22 No. 4, pp. 220-241.
- Kurunmäki, L., Lapsley, I. and Melia, K. (2003), "Accountingization v. legitimation: a comparative study of the use of accounting information in intensive care", *Management Accounting Research*, Vol. 14 No. 2, pp. 112-139.
- Lachmann, M., Trapp, R. and Wenger, F. (2016), "Performance measurement and compensation practices in hospitals: an empirical analysis in consideration of ownership types", *European Accounting Review*, Vol. 25 No. 4, pp. 661-686.

- Lapsley, I. (1991), "Accounting research in the National Health Service", *Financial Accountability & Management*, Vol. 7 No. 1, pp. 1-14.
- Lapsley, I. (1994), "Responsibility accounting revived? Market reforms and budgetary control in healthcare", *Management Accounting Research*, Vol. 5 Nos 3-4, pp. 337-352.
- Lapsley, I. (2001), "The accounting-clinical interface – implementing budgets for hospital doctors", *Abacus*, Vol. 37 No. 1, pp. 79-109.
- Lapsley, I. and Schofield, J. (2009), "The NHS at 60: adapting and surviving", *Financial Accountability & Management*, Vol. 25 No. 4, pp. 367-372.
- Laughlin, R., Broadbent, J. and Shearn, D. (1992), "Recent financial and accountability changes in general practice: an unhealthy intrusion into medical autonomy", *Financial Accountability & Management*, Vol. 8 No. 2, pp. 129-148.
- Laughlin, R., Broadbent, J. and Willig-Atherton, H. (1994), "Recent financial and administrative changes in GP practices in the UK: initial experiences and effects", *Accounting, Auditing and Accountability Journal*, Vol. 7 No. 3, pp. 96-124.
- Lawrence, S., Alam, M. and Lowe, T. (1994), "The great experiment: financial management reform in the NZ health sector", *Accounting, Auditing & Accountability Journal*, Vol. 7 No. 3, pp. 68-95.
- Lawrence, S., Alam, M., Northcott, D. and Lowe, T. (1997), "Accounting systems and systems of accountability in the New Zealand health sector", *Accounting, Auditing & Accountability Journal*, Vol. 10 No. 5, pp. 665-683.
- Lehtonen, T. (2007), "DRG-based prospective pricing and case-mix accounting – exploring the mechanisms of successful implementation", *Management Accounting Research*, Vol. 18 No. 3, pp. 367-395.
- Llewellyn, S. (1997), "Purchasing power and polarized professionalism in British medicine", *Accounting, Auditing & Accountability Journal*, Vol. 10 No. 1, pp. 31-59.
- Llewellyn, S. (2001), "Two-way windows: clinicians as medical managers", *Organization Studies*, Vol. 22 No. 4, pp. 593-623.
- Llewellyn, S. and Northcott, D. (2005), "The average hospital", *Accounting, Organizations and Society*, Vol. 30 No. 6, pp. 555-583.
- Lowe, A. (2000), "Accounting in health care: some evidence on the impact of casemix systems", *The British Accounting Review*, Vol. 32 No. 2, pp. 189-211.
- Lowe, A. and Doolin, B. (1999), "Casemix accounting systems: new spaces for action", *Management Accounting Research*, Vol. 10 No. 3, pp. 181-201.
- Macinati, M.S. (2010), "The perception of budget by hospital clinicians: lessons from two case-studies", *Financial Accountability & Management*, Vol. 26 No. 4, pp. 422-442.
- Melo, A.L., Sarrico, S.C. and Radnor, Z. (2010), "The influence of performance management systems on key actors in universities: the case of an English university", *Public Management Review*, Vol. 12 No. 2, pp. 233-254.
- Miller, P. (1998), "The margins of accounting", *The European Accounting Review*, Vol. 7 No. 4, pp. 605-621.
- Miller, P. and Rose, N. (2008), *Governing the Present: Administering Economic, Social and Personal Life*, Polity Press, Cambridge.
- Miller, P., Kurunmaki, L. and O'Leary, T. (2008), "Accounting, hybrids and the management of risks", *Accounting, Organizations and Society*, Vol. 33 Nos 7-8, pp. 942-967.
- Modell, S. (2003), "Goals versus institutions: the development of performance measurement in the Swedish university sector", *Management Accounting Research*, Vol. 14 No. 4, pp. 333-359.
- Modell, S. (2005), "Students as consumers? An institutional field-level analysis of the construction of performance measurement practices", *Accounting, Auditing and Accountability Journal*, Vol. 18 No. 4, pp. 537-563.

-
- Modell, S. (2006), "Institutional and negotiated order perspectives on cost allocations: the case of the Swedish university sector", *European Accounting Review*, Vol. 15 No. 2, pp. 219-251.
- Neu, D., Rahaman, A. and Everett, J. (2010), "Accounting for social purpose alliances: confronting the HIV/AIDS pandemic in Africa", *Contemporary Accounting Research*, Vol. 27 No. 4, pp. 1093-1129.
- Northcott, D. and Llewellyn, S. (2003), "The 'ladder of success' in healthcare: the UK national reference costing index", *Management Accounting Research*, Vol. 14 No. 1, pp. 51-66.
- Nowotny, H., Scott, P. and Gibbons, M. (2001), *Re-thinking Science: Knowledge and the Public in an Age of Uncertainty*, Polity Press, Cambridge.
- Ntim, C.G., Soobaroyen, T. and Broad, M.J. (2017), "Governance structures, voluntary disclosures and public accountability: the case of UK higher education institutions", *Accounting, Auditing & Accountability Journal*, Vol. 30 No. 1, pp. 65-118.
- Nyland, K. and Pettersen, I.J. (2004), "The control gap: the role of budgets, accounting information and (non-) decisions in hospital settings", *Financial Accountability & Management*, Vol. 20 No. 1, pp. 77-102.
- Parker, L. (2011), "University corporatization: driving redefinition", *Critical Perspectives on Accounting*, Vol. 22 No. 4, pp. 434-450.
- Parker, L. and Guthrie, J. (2005), "Welcome to 'the rough and tumble': managing accounting research in a corporatised university world", *Accounting, Auditing & Accountability Journal*, Vol. 18 No. 1, pp. 5-13.
- Parker, L. and Guthrie, J. (2010), "Business schools in an age of globalization", *Accounting, Auditing & Accountability Journal*, Vol. 23 No. 1, pp. 5-13.
- Parker, L.D. (2002), "It's been a pleasure doing business with you: a strategic analysis and critique of university change management", *Critical Perspectives on Accounting*, Vol. 13 Nos 5-6, pp. 603-619.
- Parker, M. (2014), "University, ltd: changing a business school", *Organization*, Vol. 21 No. 2, pp. 281-292.
- Parker, M. and Jary, D. (1995), "The McUniversity: organization, management and academic subjectivity", *Organization*, Vol. 2 No. 2, pp. 319-338.
- Pettersen, I.J. and Solstad, E. (2014), "Managerialism and profession-based logic: the use of accounting information in changing hospitals", *Financial Accountability & Management*, Vol. 30 No. 4, pp. 363-382.
- Pflueger, D. (2016), "Knowing patients: the customer survey and the changing margins of accounting in healthcare", *Accounting, Organizations and Society*, Vol. 53 No. 2, pp. 17-33.
- Pizzini, M.J. (2006), "The relation between cost-system design, managers' evaluations of the relevance and usefulness of cost data, and financial performance: an empirical study of US hospitals", *Accounting, Organizations and Society*, Vol. 31 No. 2, pp. 179-210.
- Pollitt, C. and Bouckaert, G. (2004), *Public Management Reform: Comparative Analysis*, 2nd ed., Oxford University Books, Oxford.
- Power, M. (2003), "Evaluating the audit explosion", *Law & Policy*, Vol. 25 No. 3, pp. 185-202.
- Power, M. (2004), "Counting, control and calculation: reflections on measuring and management", *Human Relations*, Vol. 57 No. 6, pp. 765-783.
- Power, M. (2015), "How accounting begins: object formation and the accretion of infrastructure", *Accounting, Organizations and Society*, Vol. 47, pp. 43-55.
- Preston, A.M. (1992), "The birth of clinical accounting: a study of the emergence and transformations of discourses on costs and practices of accounting in US hospitals", *Accounting, Organizations and Society*, Vol. 17 No. 1, pp. 63-100.
- Preston, A.M., Chua, W.F. and Neu, D. (1997), "The diagnosis-related group-prospective payment system and the problem of the government of rationing health care to the elderly", *Accounting, Organizations and Society*, Vol. 22 No. 2, pp. 147-164.
- Preston, A.M., Cooper, D.J. and Coombs, R.W. (1992), "Fabricating budgets: a study of the production of management budgeting in the National Health Service", *Accounting, Organizations and Society*, Vol. 17 No. 6, pp. 561-593.

- Purdy, D.E. and Gago, S. (2007), "Extending influence and accounting use – developing the frameworks to incorporate Galician legal matters about the proposed healthcare changes with managers and organizations for empirical study", *Critical Perspectives on Accounting*, Vol. 18 No. 6, pp. 707-736.
- Purdy, D.E. and Gago, S. (2009), "Studying influence and accounting use – empirical evidence about individual managers and organizations with changes in Galician healthcare", *Critical Perspectives on Accounting*, Vol. 20 No. 1, pp. 22-70.
- Richards, G.S. and Duxbury, L. (2014), "Work-group knowledge acquisition in knowledge intensive public-sector organizations: an exploratory study", *Journal of Public Administration Research and Theory*, Vol. 25 No. 4, pp. 1247-1477.
- Robbins, G. and Lapsley, I. (2015), "From secrecy to transparency: accounting and the transition from religious charity to publicly-owned hospital", *British Accounting Review*, Vol. 47 No. 1, pp. 19-32.
- Roberts, R.W. (2004), "Managerialism in US universities: implications for the academic accounting profession", *Critical Perspectives on Accounting*, Vol. 15 Nos 4-5, pp. 461-467.
- Sae'b Jarrar, N., Smith, M. and Dolley, C. (2006), "Perceptions of preparers and users to accounting change: a case study in an Australian university", *Managerial Auditing Journal*, Vol. 22 No. 1, pp. 80-94.
- Sargiacomo, M. (2015), "Earthquakes, exceptional government and extraordinary accounting", *Accounting, Organizations and Society*, Vol. 42 No. 3, pp. 67-89.
- Scarpato, S. (2006), "The integration of clinical and costing information: a comparative study between Scotland and Sweden", *Financial Accountability & Management*, Vol. 22 No. 2, pp. 133-155.
- Shaoul, J. (2005), "A critical financial analysis of the private finance initiative: selecting a financing method or allocating economic wealth?", *Critical Perspectives on Accounting*, Vol. 16 No. 4, pp. 441-471.
- Shaoul, J., Stafford, A. and Stapleton, P. (2012), "Accountability and corporate governance of public-private partnerships", *Critical Perspectives on Accounting*, Vol. 23 No. 3, pp. 213-229.
- Shore, C. and Wright, S. (1999), "Audit culture and anthropology: neo-liberalism in British higher education", *The Journal of the Royal Anthropological Institute*, Vol. 5 No. 4, pp. 557-575.
- Shore, C. and Wright, S. (2008), "Audit culture and liberal governance. Universities and the politics of accountability", *Anthropological Theory*, Vol. 8 No. 3, pp. 278-298.
- Shore, C. and Wright, S. (2015a), "Audit culture revisited. Rankings, ratings, and the reassembling of society", *Current Anthropology*, Vol. 56 No. 3, pp. 421-444.
- Shore, C. and Wright, S. (2015b), "Governing by numbers: audit culture, rankings and the new world order", *Social Anthropology*, Vol. 23 No. 1, pp. 22-28.
- Szczesny, A. and Ernst, C. (2016), "The role of performance reporting system characteristics for the coordination of high-cost areas in hospitals", *European Accounting Review*, Vol. 25 No. 4, pp. 635-660.
- ter Bogt, H.J. and Scapens, R.W. (2012), "Performance management in universities: effects of the transition to more quantitative measurement systems", *European Accounting Review*, Vol. 21 No. 3, pp. 451-497.
- Thornton, P.H., Ocasio, W. and Lounsbury, M. (2012), *The Institutional Logics Perspective: A New Approach to Culture, Structure, and Process*, Oxford University Press, New York, NY.
- Upping, P. and Oliver, J. (2012), "Thai public universities: modernisation of accounting practices", *Journal of Accounting & Organizational Change*, Vol. 8 No. 3, pp. 403-430.
- Vakkuri, J. (2010), "Struggling with ambiguity: public managers as users of NPM-oriented management instruments", *Public Administration*, Vol. 88 No. 4, pp. 999-1024.
- Van Peursem, K.A., Pratt, M.J. and Lawrence, S.R. (1995), "Health management performance: a review of measures and indicators", *Accounting, Auditing & Accountability Journal*, Vol. 8 No. 5, pp. 34-70.
- Veronesi, G., Kirkpatrick, I. and Vallascas, F. (2014), "Does clinical management improve efficiency? Evidence from the English National Health Service", *Public Money & Management*, Vol. 34 No. 1, pp. 35-42.

- Weisel, F. and Modell, S. (2014), "From New Public Management to New Public Governance? Hybridization and implications for public sector consumerism", *Financial Accountability & Management*, Vol. 30 No. 2, pp. 175-205.
- Wood, C.T. (1982), "Relate hospital charges to use of services", *Harvard Business Review*, Vol. 60 No. 2, pp. 123-130.

Further reading

- Ball, S.J. (2003), "The teacher's soul and the terrors of performativity", *Journal of Education Policy*, Vol. 18 No. 2, pp. 215-228.
- Berrone, P., Ricart, J.E., Carraso, C. and Ricart, R. (2016), *IESE: Cities in Motion Index 2016*, IESE, University of Navarra Business School, New York, NY.
- Fitzgerald, T., Youngs, H. and Grootenboer, P. (2003), "Bureaucratic control or professional autonomy? Performance management in New Zealand schools", *School Leadership & Management*, Vol. 23 No. 1, pp. 91-99.
- Ploom, K. and Haldma, T. (2013), "Balanced performance management in the public education system: an empirical study of Estonian general education schools", *Baltic Journal of Management*, Vol. 8 No. 2, pp. 183-207.
- Roberts, J. (1991), "The possibilities of accountability", *Accounting, Organizations and Society*, Vol. 16 No. 4, pp. 355-368.
- Simons, R. (1995), *Levers of Control: How Managers Use Innovative Control Systems to Drive Strategic Renewal*, Harvard Business School Press, Boston, MA.

About the authors

Giuseppe Grossi is Professor in Public Management and Accounting at the School of Business at Kristianstad University (Sweden), Professor in Accounting and at Nord University (Norway) and Visiting Professor at Kozminski University (Poland) and Tampere University (Finland). Giuseppe's diverse research focuses on governmental accounting, hybrid forms of governance and performance of knowledge-intensive public organizations, state-owned enterprises and smart cities. He is on the editorial board of several accounting and public journals and editor-in-chief of the *Journal of Public Budgeting, Accounting and Financial Management* (Emerald). Giuseppe Grossi is the corresponding author and can be contacted at: giuseppe.grossi@hkr.se

Kirsi-Mari Kallio is Associate Professor in Accounting and Finance at Turku School of Economics at the University of Turku, Finland as well as Visiting Associate Professor at Linnaeus University, Sweden. Her research interests include performance management in knowledge-intensive organizations, and more generally creativity and innovation contrasted with the themes of accounting and control, especially in the context of university organizations. She has published in interdisciplinary journals, such as *Human Relations*, *Studies in Higher Education* and *Public Money & Management*.

Massimo Sargiacomo is Professor in Accounting and Public Management at the Department of Management and Business Administration of University G.d'Annunzio (Chieti-Pescara, Italy) and Visiting Professor at Gran Sasso Science Institute (L'Aquila, Italy). Massimo's research focuses on natural disasters, corruption/frauds in the public sector, management, governance and accountability of smart cities and communities, as well as on immigration management. He is on the editorial board of several accounting and accounting history journals.

Matti Skoog is Professor in Accounting at the Faculty of Social Sciences and Economics at Åbo Akademi University (Finland) and Visiting Professor at Stockholm Business School at Stockholm University (Sweden). Matti's research focuses on interdisciplinary perspectives on accounting in relation to different empirical and societal aspects, such as university and school organizations, smart cities, hybrid organizations, sustainability processes and platform organizations in the so-called sharing economy.