

# **PERFORMANCE MANAGEMENT: OBSERVATIONS FROM EMPIRICAL WORK**

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# PERFORMANCE MANAGEMENT: OBSERVATIONS FROM EMPIRICAL WORK

## Abstract

A review of field studies in Accounting, Organizations and Society and Management Accounting Research from 1990-2003 (in press) finds that there are few field studies that examine overall performance management processes in any depth. The review highlights the fragmentary nature of performance management research in terms of the performance management elements and method. To develop a cumulative body of performance management research, future research needs to examine the operation of overall performance management processes by using in-depth research methods to understand the *use*, rather than the *existence* of performance management processes.

(Keywords: performance management, management control, literature review)

## INTRODUCTION

The current understanding of performance management practices and the consequences of different performance management and control system designs is limited (Otley, 1999). One reason for this lack of information is the fragmentary nature of the accounting and control research.

The purpose of this paper has been to review field studies published in Accounting, Organizations and Society (AOS) and Management Accounting Research (MAR) to know more about performance management research in terms of the performance management elements, research methods, questions, theories, and so on.

This paper argues that performance management research needs two criteria to develop a coherent body of research. First, it is necessary to examine performance management processes<sup>1</sup> in their totality in order to understand the interconnections between the elements (e.g., objectives, strategies, budgets, measures, targets, incentive schemes, performance evaluation, information flows). Second, in-depth research methods which involve spending time in the organisation (i.e., a longitudinal element), and in enough detail (e.g., talking to people across the organisation) are required to develop an understanding of the *use*, rather than the *existence* of performance management processes. These two criteria are discussed below.

Firstly, this field study review finds that only a small number of studies have examined overall performance management processes, despite a number of calls for this type of research over the past couple of decades (Otley, 1980, 1999; Otley & Berry, 1980; Otley, Broadbent & Berry, 1995). Machin and Lowe (1983 p.3) have argued that management control systems research “is rapidly approaching a theoretical and practical watershed. The key elements in the study of such systems are all facing profound changes simultaneously.” It appears little has changed over the past twenty years. The lack of field studies that examine overall performance management processes could be the result of the complexity and the broad nature of the area, the pressure for publications (i.e., short-termism), access issues (e.g. sensitive data), lack of resources and so on.

To provide the foundation for the development of a coherent body of performance management research in the future, Otley (1999) has proposed a performance management framework. The novelty of Otley’s approach is that it integrates five key areas (i.e., objectives, strategies, targets, incentives and information flows) to provide a useful description of the overall performance management (i.e., management control) processes.<sup>2</sup> Otley’s (1999) performance management framework is based around the following five research questions:

1. What are the key objectives that are central to the organisation’s overall future success, and how does it go about evaluating its achievement for each of these objectives?
2. What strategies and plans has the organisation adopted and what are the processes and activities that it has decided will be required for it to successfully implement these. How does it assess and measure the performance of these activities?
3. What level of performance does the organisation need to achieve in each of the areas defined in the above two questions, and how does it go about setting appropriate performance targets for them?
4. What rewards<sup>3</sup> will managers (and other employees) gain by achieving these performance targets (or, conversely, what penalties will they suffer by failing to achieve them)?
5. What are the information flows (feedback and feed-forward loops) that are necessary to enable the organisation to learn from its experience, and to adapt its current behaviour in the light of that experience? (p.365)

There are many advantages of using Otley's (1999) performance management framework. First, the five questions are broad and cover the overall performance management framework. Second, the framework is very general and can be used to describe a wide range of performance management practices including EVA<sup>®</sup>, balanced scorecard, and budgeting (see Otley, 1999). In addition to the more rationalistic approaches, the broad nature of the framework also enables an examination of the 'softer' approaches (e.g., culture). While the Otley framework is in its early development, and an earlier version has been used in a prior published field study (see Moon and Fitzgerald, 1996).

The second criterion involves the importance of understanding how the performance management processes are being used in their totality, rather than how the formal systems have been designed to operate (i.e., *use versus existence*). A longitudinal dimension enables researchers to spend time in the field and talk to various people across the organisation. This is important as several studies have shown that the formal and informal systems can interact in various ways (e.g., coupled, uncoupled, contradictory). Ferreira and Otley (2004) highlight the importance of the time and depth dimensions in their recent case studies into performance management practices at four Portuguese organisations. The authors report that Otley's (1999) performance management framework has enabled them to develop a good understanding of the existence of organisational practices over a very short time period. However, Ferreira and Otley (2004) also advise that using the Otley framework in exploratory case studies without an in-depth analysis may focus on the existence, rather than use of performance management practices. It is a concern that the differences between the formal and informal processes are often not highlighted. As Langfield-Smith (1997 p.226) states, "The important distinction between the existence and use of controls was not acknowledged in many research studies."

Over the past decade there have been a number of literature reviews in the broad performance management and control area (Baxter & Chua, 2003; Briers & Hirst, 1990; Chenhall, 2003; Ferreira & Merchant, 1992; Ittner & Larcker, 1998; Langfield-Smith, 1997; Luft & Shields, 2003; Merchant Van der Stede & Zheng, 2003; Shields & Shields, 1998). Several reviews have argued for future research to examine a broader range of performance management elements. For example, incentive studies should focus on targets, measures, incentives, and performance evaluation (Merchant et al., 2003), and participative budgeting research should examine incentives and performance evaluation (Shields and Shields, 1998). Studies that investigate performance management elements in isolation, rather than the overall inter-connections across the performance management processes (i.e., omitting variables) could risk reporting spurious findings (Briers & Hirst, 1990; Chenhall, 2003).

A number of reviews have also called for more in-depth or longitudinal studies to examine performance management issues (Briers & Hirst, 1990; Ferreira & Merchant, 1992; Langfield-Smith, 1997). Briers and Hirst (1990 p.392) conclude that the dominance of cross-sectional survey research in budgeting studies has limited the range of variables, whereas longitudinal studies can focus on "the *processes* involved in the design, use and effects of budgetary control systems." However, there are problems in gaining access to the sensitive performance management information. This would explain why Merchant et al.'s (2003) review finds only three field studies on incentives.

The highly piecemeal nature of field study research in terms of research questions and methods provides a difficult base on which to build a cumulative body of research (Baxter & Chua, 2003; Ittner & Larcker, 2001; Zimmerman, 2001). Consistent themes across the

prior literature reviews highlight the diversity in research method and organisational context (see Table 1).

**Table 1. Themes in prior literature reviews**

<b>Themes</b>	<b>Literature reviews</b>
Research method	Briers & Hirst, 1990; Ferriera & Merchant, 1992; Ittner & Larcker, 1998; Langfield-Smith, 1997; Luft & Shields, 2003; Merchant et al. 2003; Shields & Shields, 1998.
Research question	Baxter & Chua, 2003; Chenhall, 2003; Ferriera & Merchant, 1992.
Variables used	Briers & Hirst, 1990; Langfield-Smith, 1997; Luft & Shields, 2003; Merchant et al., 2003.
Measures	Chenhall, 2003; Ittner & Larcker, 1998; Langfield-Smith, 1997; Shields & Shields, 1998.
Definitions	Briers & Hirst, 1990; Chenhall, 2003; Luft & Shields, 2003.
Theory	Briers & Hirst, 1990; Chenhall, 2003; Luft & Shields, 2003; Shields & Shields, 1998.
Research sites	Ferreira & Merchant, 1992; Ittner & Larcker, 1998; Merchant et al., 2003.
Levels in the organisation	Luft & Shields, 2003; Merchant et al., 2003.

The novelty of this field study literature review is in using Otley's (1999) framework as a context within which to review the field studies. This review classifies the field studies across two important dimensions for performance management research. First, is the extent to which the field studies have examined the performance management framework in its totality, and which parts of Otley's framework have received the most, and the least attention. Second, the extent to performance management processes have been examined using in-depth and longitudinal methods.

The structure of the paper is as follows. The following section describes the method used for the literature review. The next section reviews the field study literature to document the extent of the fragmentary nature of the research in terms of research questions, theory, method, and context. This section also examines the extent to which the field studies have examined the overall performance management framework, and the depth of the research which is important to highlight the differences between the *use* versus the *existence* of performance management practices. This is followed by the conclusion.

## **METHOD**

The method that has been used to conduct this review has involved identifying all field studies examining performance management issues that have been published in the two main accounting journals (i.e., AOS, MAR) for this type of work (Ferreira & Merchant, 1992; Otley, 1999).

This field study review has been conducted in several steps. First, the abstracts and method sections for all the papers in the two journals from 1990 to 2003 (including in-press articles)<sup>4</sup> have been read to identify studies where the researchers have spent time in the field and where the field data had informed the research. This has resulted in 182 field studies being located. This compares to Ferreira & Merchant (1992) who found 82 accounting field studies over an eight year period to 1992. The in-press articles at 16

December, 2003 have been included because the intention is to update this review in 2004.

The second step has been to review the extent to which the field studies examined performance management issues. The field studies have been classified by using Otley's (1999) performance management framework. Otley's framework has been used ex-post, and no criticism is intended of individual studies which address a diverse range of research questions.

The advantage of using Otley's (1999) framework is that it is so broad that overall performance management processes can be classified. For example, question one contains objectives or the way the objectives are evaluated, question two includes strategies or the processes used to implement and measure the achievement of the strategies (e.g., strategic planning, budgeting), question three consists of performance standards (i.e., targets) or standard-setting processes, question four takes in rewards, sanctions or performance evaluation processes, and question five includes information flows (e.g. feedback or feed-forward) and other issues such as organisational learning.

109 of the 182 field studies located have been classified under one or more of Otley's (1999) five performance management questions. It should be noted that this review has a bias towards including, rather than excluding field studies in two ways. First, the 109 field studies address Otley's (1999) questions to varying degrees. For example, the depth of analysis on incentives ranged from a brief mention of the extrinsic rewards for managers in some papers, to published company incentive data. Second, the field studies have been included if they have covered any parts of Otley's (1999) broad questions. For example, field studies were ticked under question four if they have examined rewards, or sanctions or performance evaluation processes (and any combinations) (see Table 2).

The remaining 73 field studies were excluded from the review. These field studies were excluded for a number of reasons including a different focus (e.g., product costing, ABC, JIT, AMT, projects, joint ventures, inter-firm issues, outsourcing, owner-managers, professionals) and one paper that reviewed the University sector. Other studies were excluded because the interviews only helped in questionnaire design, or were not reported in the paper. Thirty four of the excluded papers are from MAR and 39 from AOS.

The third step involved classifying the studies by the research method. The field studies use a diverse range of methods so a classification based on time spent in the field (if given), or the number of interviews conducted in one organisation (if time spent is not disclosed) has been used.

The field studies have been classified as *longitudinal* where researchers have spent two or more years in the field. Other field studies have been conducted in *some depth*, such as where more than three months or more has been spent in the organisation, and/or the researchers have conducted over 18 interviews in one organisation. The cut-off point of 18 interviews has been chosen because no other studies were close to being classified here. *Cross-sectional* studies are usually short-term studies where research is conducted a range of organisations, and the remaining studies were classified as *other* because they were either short-term studies in one organisation, or there was little detail on the method.

## **FIELD STUDY REVIEW**

The key findings of this field study review are the existence of few in-depth studies of overall performance management processes, and the fragmentary nature of the research with a diverse range of methods, questions, theories and contexts. Over the past 13 years

there have been numerous field studies examining performance management issues, and the trend appears to be increasing.<sup>5</sup>

The field study review has classified the 109 field studies in terms of the extent to which these studies examine Otley's (1999) performance management questions and the research methods used. Table 2 shows the field studies in date order (then author order), the journal in which it was published, the research method described in the paper, the classification of the depth of the research and the number of organisations studied, the research questions and theory, and Otley's (1999) questions. Thirty six of the field studies were published in AOS, and 73 in MAR.

**Insert Table 2 about here**

## **DESCRIPTION**

### ***RESEARCH QUESTIONS***

There is considerable diversity in the research questions (see Table 2). A review of the diverse range of research questions used in the 30 longitudinal studies clearly illustrates this point: accountability and control (Otley, 1990), managing interdependencies (Euske & Riccaboni, 1999), budgeting and planning in the Church (Parker, 2001, 2002), performance measurement and accountability (Ahrens & Chapman, 2002), management accounting change (Amat, Carmona & Roberts, 1994; Bhimani, 2003; Cobb, Helliar & Innes; Jacobs, 1998; Seal, 2001), role of accounting in labour relations (Ezzamel, Willmott & Worthington in press; Saravanamuthu & Tinker, 2003), accounting, organisational culture and change (Dent, 1991), accountability and accounting talk (Ahrens, 1996, 1997), examining intellectual capital systems (Leitner & Warden, 2003), world class manufacturing (Lind, 201), the role of accounting systems in times of crisis (Ezzamel & Bourn, 1990), costing and casemix systems in hospitals (Chua, 1995; Lowe, 1997, 2001; Lowe & Doolin, 1999), parenting styles and management control systems (Nilsson, 2000), transfer pricing (Perera, McKinnon & Harrison, 2003; van Helden, van der Meer-Koostra & Scapens, 2001), budgeting Christiansen & Skærbæk, 1997; Collier, 2001; Marginson, 1999; Perez & Robson, 1999), and performance evaluation (Johansson & Baldvinsdottir, 2003).

### ***THEORY***

The field study review has also highlighted the fragmentary nature of the theoretical development in performance management. Table 2, column 5 includes the theory used in the paper (if mentioned). Apart from the research agenda established by the Management Control Association in the UK to develop a theory-driven research agenda (see Otley and Berry, 1994), there appears to have been few attempts to build on the theoretical development of prior studies. Studies conducted by the Management Control Association reviewed include Archer & Otley (1991), Berry et al. (1991), and Otley (1990), and a recent study by Marginson (1999). Berry (1983 p.46) stated that "The existence of the debate on research in management accounting and control is evidence for dissatisfaction with the current state of understanding, and suggests moreover the current state of theory is inadequate to help us understand the phenomena we encounter."

More recently, Zimmerman (2001) argued that management accounting research had not moved from describing practice to theory development. Zimmerman also recommended that researchers should focus on economics based theories. This sparked intense debate through a series of papers in the *European Accounting Review* (volume 11, 4, 2002).

This field study review finds that few field studies have used the same theoretical base (see Table 2). While diversity in theoretical development is important to provide new insights (see Luft & Shields, 2001; Lukka & Mouritsen, 2001), the question remains “how much diversity is enough?” Otley (2003) recognises the lack of theory development in performance management and for this reason he has proposed a performance management framework as one way forward to begin to build a cumulative body of research (see Otley, 1999; Ferreira and Otley, 2004).

### ***DEPTH OF THE RESEARCH METHOD***

A diverse range of research methods have been used by researchers (see Table 2). The field studies have been classified as 30 *longitudinal* studies (L<sup>6</sup>, two or more years), 32 field studies that have been conducted in *some depth* (D, three months or more was spent in the organisation, and/or had conducted over 18 interviews in one organisation), 34 *cross-sectional* studies (C, shorter studies across 3 to 71 organisations), and 13 studies classified as *other* (O) are short-term studies, or there is little detail on the method. The numbers in Table 2, column 4 indicate the number of organisations studied.

The depth of the research including the time spent, interviews (i.e., numbers, levels, across areas), and observation, is sometimes difficult to classify because of the diversity of the research methods used and the lack of information. Researchers need to provide more detail on the depth of the research to assist the reader in ascertaining whether the study reports a description of the formal system, or the actual use of the performance management framework. In some cases researchers have identified serious consequences (e.g., inequity, contradictions, ambiguous performance measures, short-termism) of the performance management systems, but could only highlight potential consequences because they have to leave the field before they could observe the actual consequences.

It is a concern that there is a lack of depth of analysis into many of the performance elements. For example, the design of incentive schemes can have consequences for other parts of the performance management framework (e.g., strategies, targets, budgets, performance evaluation processes). Few studies examine the consequences of incentive system design over time. Often the field studies mention the types of incentive schemes in the organisation, but do not go into any depth because of access problems or it is not the focus of their research question. One rare incentive study with published company data is Merchant and Riccaboni (1990). Performance evaluation is often implicit (e.g., the style of use of budgets), rather than the operation of the performance evaluation processes which is often seen as the domain of human resource researchers. Penalties are often implicit, such as not receiving a bonus. Where the bonus payments are substantial (e.g., 20-50% of salary), their impact is worthy of more attention.

An interesting trend is the increasing number of longitudinal studies, that is 16 in the last three years (2000-2003 including in press) compared to 14 in the previous decade.<sup>7</sup> It is not surprising that most of the longitudinal studies restrict their study to one organisation (except for Ahrens, 1996, 1997; Chua, 1995; Leitner & Warden, 2003; Nilsson, 2000).

### ***ORGANIZATIONAL CONTEXT***

Researchers have also examined performance management practices in a wide array of organisational contexts (see Table 1). Studies have been conducted in a diverse range of organisations including manufacturers, professional firms, police, probation services, hospitals, local bodies, the Church. There is considerable diversity in the countries where performance management processes have been conducted, with field studies the United Kingdom and Europe being more common.<sup>8</sup>

The field studies vary as to whether whole organisations or parts of an organization are studied. Twenty six of the field studies appear to have been conducted in whole organisations, and the remaining studies in parts of the organisations such as subsidiaries, branches, or regions.

A range of people in organisations have been interviewed. Researchers may interview one particular group (e.g., accountants) or groups (e.g., senior managers, middle managers), or interview a range of people across the organisation. Interviews appeared to have been conducted across the organisations (to varying degrees) in 46 of the field studies.

Few studies have re-visited the sites of prior field studies. Two exceptions were the budgeting practices in the Jute Corporations (Alam, 1997), and Otley's (1990) return to the Coal Board.

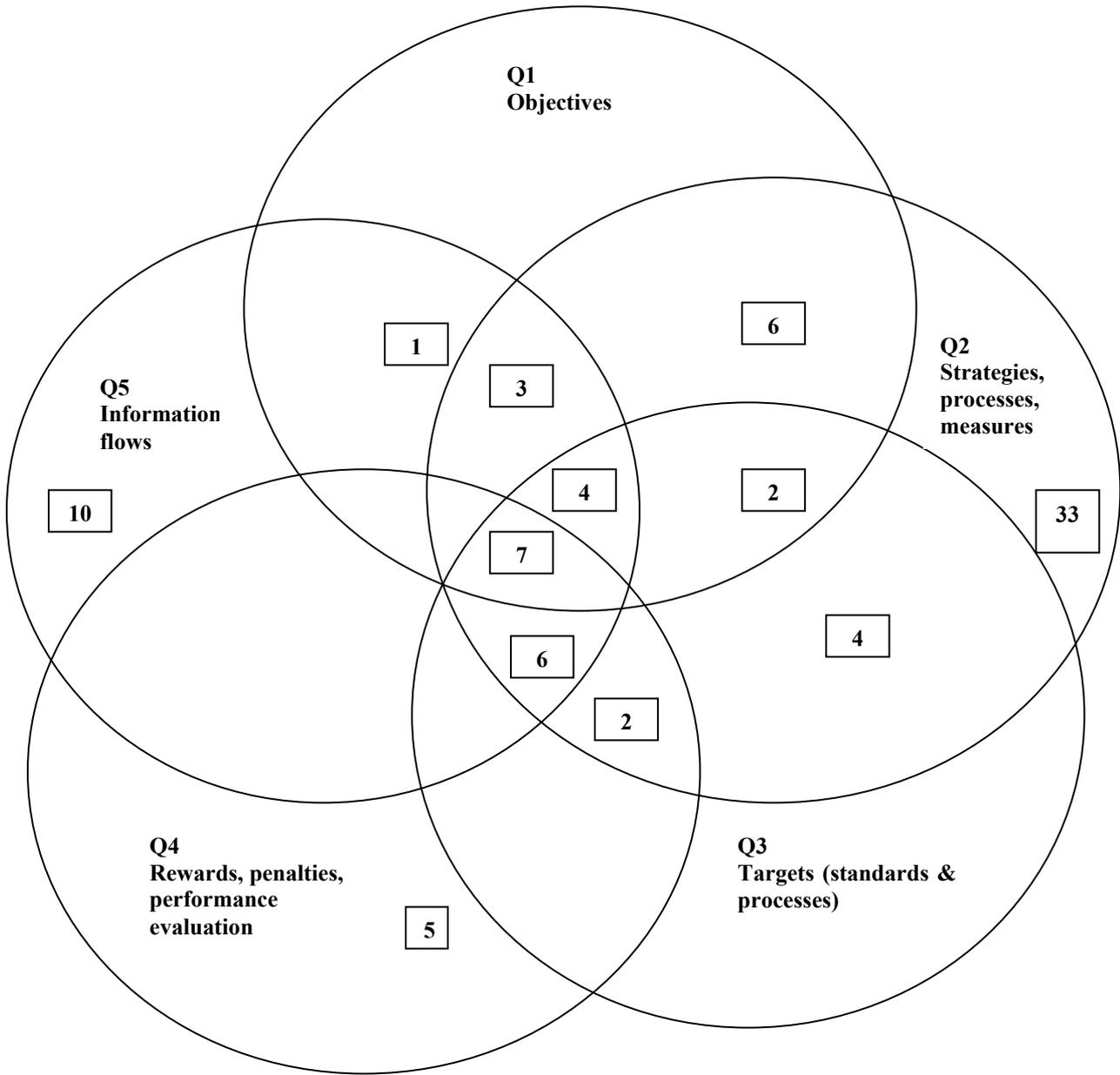
## **ANALYSIS**

### ***OVERALL PERFORMANCE MANAGEMENT PROCESSES***

There are very few field studies that examine overall performance management processes. Only seven studies examined all of Otley's (1999) questions to some extent, and that the majority of studies focused on one or two questions (see Table 2). A further 16 field studies covered parts of four of Otley's (1999) questions and 13 field studies part of three questions. In contrast, the majority of the field studies focused on single issues (48 studies) or two of the questions (25 studies).

A Venn diagram is used to highlight the fragmentary nature of the field studies examining performance management processes (see Figure 1 on the following page). The numbers on the Venn diagram indicate which of Otley's (1999) performance management questions that 83 of the 109 field studies have examined to some extent. For example, the number 3 (see box in Figure 1 below) indicates that three field studies have examined objectives, strategies (or processes, or measures) and information flows. The seven in the centre of the diagram indicate the seven field studies which have included overall performance management processes to some extent. The remaining 26 field studies examined a further diverse range of performance management elements that could not be included in Figure 1.<sup>9</sup>

**Figure 1 Performance management questions (Otley, 1999)**



Most of the research is being conducted around Otley's (1999) question two on strategy, processes and measurement. In particular, performance measurement is the most commonly studied performance management issue, followed by the processes (e.g., budgeting). The field studies which focus on processes or measurement issues also tend to discuss a range of other performance elements including targets, incentives, information flows. A number of studies also discuss information flows, especially feedback flows around budgeting and monthly reporting (question 5).

The performance management areas which receive the least attention include objectives, targets and incentives (questions 1, 3 and 5). One reason that fewer studies explicitly focus on objectives (e.g., mission, vision) could be due to the relative novelty of objectives in management accounting research (see Ittner and Larcker, 2001). It is also interesting that less than half the studies mention strategies or the processes used to develop strategies.

Few studies incorporate performance standards (targets) or the standard-setting processes to some extent. This is surprising given the behavioural impact of targets and target setting processes when they are linked to performance evaluation and rewards that is often discussed in the literature. The paucity of studies which examine incentives is not surprising given the difficulties with access to such sensitive data.

The field studies also lack an examination of feed-forward information flows such as the interactive control systems (Simons, 1995). A related point is the paucity of studies that examine double-loop learning or organisational learning.

The trend in the breadth of performance management processes covered in the field studies reveals that there are more field studies examining a broader range of performance issues, as well as more single-element-type studies in the past three years compared to the previous decade (1990-1999).<sup>10</sup>

There are a number of definitional issues relating to the various management variables studied in real organisations. For example, it is unclear what is a tight target compared to an achievable target between studies. The ways organisations tend to 'customise' techniques such as EVA<sup>®</sup> and Balanced Scorecard also shows considerable diversity (Malmi, 2001; Malmi & Ikäheimo, 2003).

In relation to the depth of the method used in the seven field studies at the centre of the Venn diagram, two are longitudinal (Ahrens & Chapman, 2002; Otley, 1990), four have been conducted in some depth (Alvesson & Karreman in press; Archer & Otley, 1991; Hogue & Hopper, 1994; Jazayeri & Hopper, 1999), and one is a short-term cross sectional study (Malmi & Ikäheimo, 2003).

### ***USE VERSUS EXISTENCE***

There are only a small number of studies which examine overall performance management processes by spending a significant period of time in one organisation to understand how the system is actually being used. Only seven of the 109 field studies examine four or five of Otley's (1999) performance management questions and over a period of at least two years (Ahrens & Chapman, 2002; Cobb, Helliar & Innes, 1995; Euske & Riccaboni, 1999; Lind, 2001; Otley, 1990; Parker, 2002; Saravanamuthu & Tinker, 2003).

A further 10 field studies examine four or five of Otley's (1999) performance management questions in some depth (Alam, 1997; Alvesson & Karreman, in press; Archer & Otley, 1991; Berry, Loughton & Otley, 1991; Dirsmith, Helan & Covaleski,

1997; Hoque & Hopper, 1994; Jazayeri & Hopper, 1999; McNair, 1991; Moon & Fitzgerald, 1996; Uddin & Hopper, 2001).

Understanding the operation of the formal and informal performance management processes requires considerable time spent in the field to highlight how different the superficial explanations are from the actual situation. Rather than describing the formal processes, this requires an understanding of how the system actually operates. Several studies have shown that the formal and informal processes can interact in several ways including supporting each other, contradicting each other (or uncoupled), and/or supporting and contradicting each other. Some examples from the field studies are used to illustrate this point.

Returning to the British Coal Board after 15 years, Otley (1990) finds that there is little difference in the formal performance management systems over time, but considerable differences in the way the informal system operates. If a short-term field study or a survey had been conducted it is possible that little change to the performance management practices would have been reported.<sup>11</sup>

While researching the performance management practices in a Global consultancy firm, Alvesson & Karreman (in press) report that they only ‘stumbled’ on the ‘ghosting’ issue when they attended a management meeting. The high levels of under-reporting of time by consultants became one of the key issues in their study. They find that the under-reporting the time spent on jobs has a substantial impact on the formal systems such as financial, performance evaluations, and knowledge management.

The formal and informal controls in budgeting in the Church, support and contradict each in what Parker (2002 p.88) describes as the incremental budgetary *mélange* which provides a buffer against the “almost bewildering complex array of constituents” and allows the Church to cope with uncertainty when trying to balance the competing objectives of religious mission and financial obligations.

Spending more time in the field can also develop a deeper understanding of the complex phenomena, rather than the story the organisation wants to be told. As Euske and Riccaboni (1999 p.464) report how their understanding evolved over time and state “as we became more familiar with the organisation and the information presented to us, we gradually became aware that what we heard was not what we were being told.”

## **CONCLUSION**

This field study review documents the extent of the fragmentary nature of performance management research in relation to overall performance management processes and the depth of the method, albeit through reviewing field studies published in the main two accounting journals for this type of work.

Of the 109 performance management research field studies reviewed, only seven field studies in performance management research have studied all parts of Otley’s (1999) framework. In relation to the depth of research examining overall performance management processes, seven longitudinal field studies examine four to five of Otley’s (1999) questions, and a further ten studies were conducted in some depth.

Future researchers need to include in-depth studies of performance management processes in their totality to ensure they report the use, rather than the existence of control. Several studies have shown that the formal and informal processes can interact in several ways including supporting each other (Collier, 2001; Dirsmith, Helan & Covalleski, 1997;

Lewellyn, 1998), contradicting each other (or uncoupled) (Alam, 1997; Hogue & Hopper, 1994; Marginson, 1999; Parker, 2002), supporting and contradicting each other (Alvesson & Karreman in press; McNair, 1991).

While the trend towards conducting field studies appears to be increasing, this review has highlighted the fragmentary nature of the field study research in terms of the range of performance management variables studied, the depth of the research, research questions, theory development, and organisational contexts. The field studies by the Management Control Association in the UK are notable exceptions (Otley & Berry, 1994). These findings are consistent with prior literature reviews in the broad management accounting and performance management area. One suggestion is that the complex nature and depth required could be conducted by teams of researchers (similar to the Management Control Association), and across countries.

There are a number of reasons for the diversity in the field studies. First, there are access issues (e.g., sensitivity, time constraints in the organisation or by the researcher, theoretically interesting organisations)<sup>12</sup>. Even where access is granted, sensitive information can be excluded by the organisation (Dirsmith, Helan & Covaleski, 1997; Greenhalgh, 2000). This might explain why there are few field studies which examine incentive systems in any detail. Another reason may be that the researchers may have to leave the field earlier than intended (Alam, 1997), or access is restricted to the whole organisation (Berry et al., 1991; Otley, 1990). The wide range of theories and approaches that have been used may also be indicative of the complex nature of performance management. Other reasons seem to be related to the problems for researchers to sustain long periods of study in one organisation such as the publication pressures (Otley, 2001) and resource issues (time to spend in the organisations, travel and accommodation).

Given the number of calls over the past decade to build a cumulative body of knowledge, little appears to have changed. This raises a number of interesting questions. Why is the research so diverse? Is it because researchers are an eclectic group who are happy with the current state of affairs? Is it the complex nature of the phenomena studied? What are the impediments to developing a cumulative body of knowledge? Do we need to interview researchers in the field to understand more about how and why they conduct the research the way they do?

The limitations of this paper are based around the problems in classifying the diverse range of performance management studies. In relation to using Otley's (1999) framework ex-post to classify the research there is a bias towards including, rather than excluding the field studies. The diversity of research methods and the lack of information provided in some studies have necessarily resulted in arbitrary classifications. However, the findings that there are few studies which examine overall performance management processes are such that even considerable changes to the classifications of some papers would have little effect on the overall findings.

The purpose of this field study review has been to document the fragmentary nature of performance management research that has resulted in a lack of development in the area. To build a cumulative body of knowledge, Otley (1999) calls for future research to begin by examining the performance management framework over time in one organisation. Otley's (1999) performance management framework provides a tool-kit for researchers to use to describe and assess performance management processes in an organization.

The findings of the fragmentary nature of performance management research does not detract from the contributions of the individual field studies which make a range of contributions to knowledge including providing new insights, and evidence of

confirmatory or contradicting practices. However, to develop a cumulative body of knowledge in the future, performance management research needs greater breadth and depth in research methods.

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<sup>1</sup> The terms performance management and management control systems are used interchangeably in this paper. The definition for performance management used in this paper is the broad range of issues covered in Otley's (1999) five questions.

<sup>2</sup> For example, Ittner & Larcker (2001) recognise the "the choice of *specific* organizational objectives traditionally has been outside the scope of management accounting research" (p.358).

<sup>3</sup> Rewards should be understood in the widest sense, and not be restricted to just short-term financial rewards, important though these may well be.

<sup>4</sup> The in-press articles were located on the AOS and MAR websites:

<http://www.sciencedirect.com/science/journal/03613682>;

<http://www.sciencedirect.com/science/journal/10445005>

<sup>5</sup> Forty two field studies examining parts of performance management processes have been published in the last three years (including in press), compared to 67 for the previous decade.

<sup>6</sup> This denotes the classification on Table 2, column 4.

<sup>7</sup> Of the 104 field studies they included: longitudinal studies (14 studies pre-2000, 16 studies post-1999), in-depth studies (22 studies pre-2000, 10 studies post-1999), cross sectional studies (23 studies pre-2000, 11 studies post-1999), and shorter time-frame studies (8 studies pre-2000, 6 studies post-1999).

<sup>8</sup> In MAR there were 30 studies conducted in UK organizations, 2 in the US, 31 in Europe and 19 in Australasia. In AOS 14 were conducted in the UK, 7 in the US, 5 in Europe and 10 in Australasia.

<sup>9</sup> The performance measurement elements that have been examined in the remaining 26 field studies are: objectives, strategies, targets, incentives (4 field studies); objectives, strategies incentives (3 studies), objectives, strategies, incentives, information flows (2 studies), strategies and information flows (9), strategies and incentives (4), strategies, incentives, information flows (2) strategies, targets information flows (1), and strategies and incentives (1).

<sup>10</sup> Field studies that examined parts of four or five of Otley's questions (14 studies pre-2000, 23 studies post-1999), and one or two of Otley's questions (45 studies pre-2000, 28 studies post 1999).

<sup>11</sup> Otley and Berry (1994) make this point in relation to surveys.

<sup>12</sup> Baxter and Chua (2003 p.99) argue the diversity may in part be due to problems in gaining access to "theoretically interesting organizations."

**Table 2. Field study review\***

Study	J	Research method (classification in next column)		Research Question and theory	Otley's (1999) questions				
					Q1	Q 2	Q 3	Q 4	Q 5
					O	St	T	R	I
Ezzamel & Bourn (1990)	A	Longitudinal case study (participant observation, documents, attended meetings, talked to organisational participants, etc.) at one UK university. Interviews across the organization.	L	Role of accounting information systems in financial crisis (in a university) Theory: crisis (Turner);	✓	✓			✓
Innes & Mitchell (1990)	M	Exploratory field study in seven firms in the electronic sector in the UK. Interviews with accountants and users (no detail on numbers).	C7	Change in management accounting. Contingency theory.		✓			✓
Merchant (1990)	A	Field study with exploratory interviews and a survey of PC managers in 2 large decentralised firms in the US (17 different PCs and diverse industries). Interviews conducted 1980-1983 across levels (little detail on number of interviews).	D2	Effect of financial controls on data manipulation and management myopia examine discretionary programme decision making.		✓	✓		
Merchant & Riccaboni (1990)	M	Field study in Fiat (vehicle manufacturer) Italy. Interviews with 9 top managers and corporate staff + 10 divisional and line managers Over 48 hours) and documentation. Exploratory = descriptive. Time frame?	D1	Background, design and consequences of Fiat's incentive scheme in Italy.		✓	✓	✓	
Otley(1990)	M	Case study at one region of British coal. Interviews with Colliery managers and superiors between 1987-1988 Longitudinal because of author's previous PhD study 15 years earlier.	L	Accountability and control. Theory: "No single theory captures the variety of complex control processes observed". Some discussion on contingency theory, agency theory (information asymmetry)	✓	✓	✓	✓	✓
Rickwood, Coates & Stacey (1990)	M	Case study in Stapylton UK (hygiene and cleaning supplies) with several visits over 6 months and interviews with managers. No other details on number of interviews.	O	Examines the use of strategic management accounting to gain a competitive advantage					✓
Roberts (1990)	A	A case study in Electric light bulb Company a subsidiary of a UK conglomerate No details as to the length of the study, or interviews, etc. But appears to be in-depth. One exception, this paper has been classified as D (some depth).	D1	Examines strategy and accounting in a UK conglomerate. Theory: Gould and Campbell (financial, strategic, strategic planning), and Structuration (Giddens)		✓		✓	
Simons (1990)	A	2-year field study in 16 US firms in one industry. Conducted over 70 interviews, documentation and observation at meetings in 16 firms. Paper refers in depth to two firms with different strategies. No detail on length of time in any one organisation, levels.	C 16	Examines the relationship between business strategy and MSC. Theory: Anthony MSC; strategic control (Lorange); strategy topologies.		✓	✓	✓	✓
Archer & Otley (1991)	M	Interpretative study with interviews, observation, and documents. Revelatory and exploratory. Rumenco is an animal foods producer in the UK. Several visits were made to HO and operating sites over several months. Cost centres. Whole organisation. Unclear if interviews are across levels. Set out to study overall control processes.	D1	Relationship between strategy, planning and control (and managerial performance evaluation) Theory: Discusses Chandler 1962, Rhenman (1973) and Dermer's (1977) model. Data did not easily fit the models.	✓	✓	✓	✓	✓
Berry, Loughton & Otley (1991)	M	RIF a UK bank-owned finance house. Exploratory study conducted during Winter 96 and Spring 97. Interviews with managers, questionnaire and documents. Functionalist/ insight approach, Focused on the control of branches. One region with 15 branches. Interviews with branch, area and regional managers.	D1	Examine the operation of a new accounting performance measurement and control system and MBO system Used 3 theories: MSC (Anthony, organisational behaviour; contingency theory.		✓	✓	✓	✓
Carr, Tompkins & Bayliss	M	Pilot study into one UK vehicle components manufacturer. No detail on time spent, interviews, etc. Comparison to approaches in 11 British	O	Examine the relationship between Strategy and CAPEX decisions		✓			

(1991)		and 14 German vehicle component companies. Part of a larger 10-year longitudinal study.							
Dent (1991)	A	Longitudinal field study (two years with follow-up visits 1-2 years later) in a UK railway focusing on the "senior managerial elite." Interviews with 31 managers, observation, etc.	L	Accounting and organizational culture and change Theory: Culture, Symbolic and processual; Geertz; organizational change (uncoupling and recoupling); institutional theory; theory of inertia.	✓	✓	✓		
Lumijarvi (1991)	M	Field study in one corporation (Scandinavia Corp) with business units. Diversified industrial in Finland. Conducted 71 interviews across levels between September 1988 and June 1989, informal discussions and documentation.	D1	Examines how subordinates attempt to get superiors committed to CAPEX investments		✓			
McNair (1991)	A	Exploratory field study over 8 months and extensive range of interviews, surveys and Delphi panels. Research in 3 major accounting firms in New York, US. Little detail of interviews across firms. Interviews across levels.	D3	Examines the cost/quality dilemma is embedded in the MSC in a public accounting firm	✓	✓	✓	✓	
Coates, Davis Emmanuel, Longden & Stacey (1992)	M	Field study with 45 managers. Interviews across 15 parent multinationals from G, UK, US.	C 15	Examines relationships between objectives, management responsibilities and incentives and performance evaluation systems. Theory: Gould and Campbell's typology (1989)	✓	✓		✓	
Preston, Cooper & Coombs (1992)	A	Interviews in the Osgood District (in UK), observation, documentation review. Little detail on the interviews and time spent.	O	Examined the failed attempt to introduce a budgeting system in the National Health Service in the UK. The process of fabrication (Latour, 1987)		✓			
Jones, Currie & Dugdale (1993)	M	Reflections on practice from prior field studies completed by the authors in manufacturers in the UK. No detail on method.	O	Accounting and technology in Britain and Japan		✓			
Euske, Lebas & McNair (1993)	M	Three phases: 1) 5-7 interviews conducted at five sites in US and Europe, 2) questionnaires at 10 sites, and 3) and 5-7 interviews (line managers and staff personnel) at each site and questionnaires in US and Europe. Range of industries.	C5	To what extent do performance measurement systems reflect company strategy and a customer perspective? Theory: Kotter and Heskett (4 factors influence OB: corporate culture, formal structure, systems, leadership, competitive and regulatory environment.).Mintzberg's 4 archetypes of structures.	✓	✓		✓	✓
Jonsson & Stoll (1993)	M	Action research over one year in 6 social service units of a Swedish local government body. Little detail on number of interviews, etc..	D1	Examined use of financial information in a caring setting					✓
Amat et al (1994)	M	Case study in a Spanish biotech company. States interviews conducted over 10 years, but little detail on who was interviewed, time, etc. Whole organization.	L	Context and change in management accounting systems Theory: Institutional perspective		✓			✓
Hoque & Hopper (1994)	M	Case study over 7 months with 141 interviews (across levels, and public officials), documentation, observation and a survey.	D1	Examines management control in a Bangladeshi jute mill Multiple theoretical perspectives: technical-rational; human relations; interpretative approaches; institutional factors	✓	✓	✓	✓	✓
Humphrey (1994)	A	Case study conducted in 1987 with interviews, meeting notes and other documentation. No detail on number of interviews, time spent, levels interviewed.	O	Examines the attempt to implement a financial management information system (FMIS) in the probation service in the UK	✓	✓			
Polesie (1994)	M	Author was an observer on a team setting up a new accounting system in a Norwegian shipyard.	O	Explores the design process involved in implementing a new accounting system in the engineering department of a shipyard		✓			
Van der Meer-Kooistra (1994)	M	Number of case studies in 4 Dutch multinationals in 1990-1992 (with interviews across the organization and documentation). No detail in paper of number of interviews, time spent in each organisation. Detail in a Dutch publication.	C4	TP in an organizational setting Transaction cost theory		✓			
Bunce, Fraser & Woodcock (1995)	M	Field visits into four organisations No detail on method, time spent, etc. Part of a large study	C4			✓			
Chua (1995)	A	Longitudinal study, qualitative data collected while author was part of	L3	Title: Experts, networks and inscriptions in the fabrication of accounting		✓			

		the project team between mid-1998 to July 1991. Introduction of case mix into three public hospitals in Australia. Data include attending wide range no of meetings, interviews (details?), documentation.		images: a story of the representation of three public hospitals. Theories: Latour and Callon					
Coates, Davis & Stacy (1995)	M	Interviews in 45 corporations (15 multinational and 30 divisions and subsidiaries) in the UK, US and G. One to ½ day visit each organization. Interviews with finance directors and managers (levels?)	C 45	Performance measures, incentives, short-termism	✓	✓		✓	
Cobb, Helliard & Innes (1995)	M	Longitudinal case study in one division of a UK multi-national bank (1990 – 1993). Regular visits, telephone conversations, observation, documentation, etc. Interviews with accountants.	L	Management accounting change in a Bank. Change theory	✓	✓	✓		✓
Colbert & Spicer (1995)	A	Four cases of TP examined in four companies in the electronics industry (US) over an 18 month period. The longest period of study in one organisation was 6 months in Hightech (not longitudinal). Interviewed 46 managers at corporate and in the buyer and seller units.	D1 +3	Transfer pricing Theory: Transaction cost economics.		✓			
Collier & Gregory (1995)	M	Field study conducted May – September 1993 in 6 Hotel groups. Little detail on the number of interviews with a range of accountants.	C6	Investment appraisal in service industries: a field study analysis of the U.K. hotels sector		✓			
Jacobs (1995)	M	Case study conducted in 1992. Structured interviews with 44 staff (clinicians and managers), and documentation	D1	Examines the introduction of budgeting in a NZ hospital. Theory: Habermasian model of society and Laughlin’s model of change.		✓			
Merchant, Chow & Wu (1995)	A	Field study (interviews) in four firms (2 x US; + Taiwan) Interviews (TChem 13; Telec 10) and compared to Merchant’s 1989 study. Interviews across levels in chemical and electronics company.	C4	Measuring, evaluating and rewarding profit centre managers in the US and Taiwan Theory: Culture (Hofstede).		✓		✓	
O’Connor (1995)	A	Survey of manufacturing managers in 62 firms in Singapore. Interviews with managers in 11 firms (2 local and 9 foreign)	C 11	The influence of culture on usefulness of budget participation by Singapore managers. Culture, budget participation		✓			
Ogden (1995)	A	Interviews with managers in six of the water authorities in the UK, and documentary review. No detail of number of interviews and time spent.	C6	Examines the management control changes in six of the water authorities in the UK pre- and post-privatisation. Constitutive role of accounting in organisational change	✓	✓		✓	✓
Sinclair (1995)	A	Interviews with 15 CEOs of Australian public sector organisations between March and October 1990. Interpretative and discourse analysis used.	C 15	Exploring the “chameleon quality of accountability”				✓	
Ahrens (1996)	A	Ethnography study with interviews and observations with management accountants (and operational managers) in 7 (of the 8) largest brewers in Germany and in 3 (of the 6) largest British brewers. Includes detail on observations (extensive) interviews (numbers and levels in each firm?). Range of managers interviewed. Observations over a two-year period reported in Ahrens (1997).	L 10	Examines different styles of accountability between British and German brewers		✓	✓		
Carr and Tompkins (1996)	M	Interviewed 49 companies about one strategic investment decision in the vehicle components industry (part of a larger study). Interviews with managers.	C 49	Strategic investment decisions in UK , US and German companies Uses Shank’s model.		✓			
Coad (1996)	M	Four month action research project in a contract services department of a local council in the UK (no detail on the number of interviews, levels interviewed, etc.)	D1	Learning orientation in strategic management accounting (SMA) Theory: Learning and performance orientations					✓
Moon & Fitzgerald (1996)	M	Field study into one division of TNT Express in UK. Interviewed 15 people, 34 hours over 4 months. Interviews with 5 top managers and corporate, 1 hub manager, 3 depot managers (out of 28), and 6 other depot personnel. Uses an early version of Otley (1999).	D1	Examine the performance measurement system in TNT		✓	✓	✓	✓

Van Cauwenbergh, Durinck, Martens, Laveren, & Bogaert (1996)	M	Field study of 50 managers in Belgium. Structured interviews with some room for comment.	C 50	Examine strategic decision processes		✓			
Ahrens (1997)	A	Observation in one German and two British brewers. Observation over two years in the three organizations. See Ahrens 1996.	L3	Examined paired situations between management accountants and sales people in British and German brewers.				✓	
Alam (1997)	M	Interviewed 65 people at various levels in the jute corporate and 46 in the Sugar corporation, plus a survey. Whole organization and interviews across the levels.	D2	Examined the budgetary process in two state-owned enterprises in Bangladesh. 1) high uncertainty and 2) moderate uncertainty. Theory: Contingency and Institutional theory	✓	✓	✓		✓
Brignall (1997)	M	Illustrates ideas by retrospectively analysing prior case studies in consultancy, service shop, mass service and service companies in the UK. No detail of time or interviews.	C4	Cost system design and performance measures. Life cycle theory, contingency theory, service process type theory and Fitzgerald et al (1991).		✓			
Christiansen & Skærbaek (1997)	M	Data collected from 1986-1991 including 57 interviews (across levels) and other sources at the Royal Danish Theatre.	L	Implementing budgetary control in the performing arts over 15 years Budget game theory (Crozier and Friedberg, 1980), power.		✓			
Dirsmith, Helan, & Covaleski (1997)	A	Interpretive field study with 180 semi structured interviews– across the Big 6 firms (US) – across a range of levels in both phases. Phase I in 1980 (Phase II?). Extensive range of data collected (e.g., observation, documentation) across levels. Ethnographic and interpretative.	D6	Structure-agency-control (e.g., MBO and mentoring practices) in a Big 6 accounting firm. Institutional theory, sociology of the profession, structuration theory	✓	✓	✓	✓	
Iltner & Larcker (1997)	A	Survey data (1991) from management consultancy firm – four countries and two industries. At the end they report data from field interviews in 44 organisations. Range of people interviewed in US manufacturers (no details on specific firms).	C 44	Strategy-control systems – organisational performance.		✓			
Kloot (1997)	M	Case study in two municipalities in Victoria, Australia. Research conducted over four months, senior managers interviewed, informal contacts, documentation. No detail on the number of interviews.	D2	Organisational learning and management control systems Theory: learning (knowledge acquisition; information distribution, information interpretation, org memory)(Argyris, Senge), MSC (Anthony); cybernetic, non-cybernetic; contingency theory		✓			✓
Lowe (1997)	M	Based on two-year longitudinal case study in Health Waikato, NZ	L	Examines the developments of costing of blood products at the hospital Theory: Sociology of translation.	✓	✓			
Ogden (1997)	A	Based on some interviews with managers. (see Ogden 1995 for method).	C6	Examining the “place of customers” in the privatised water industry Theory: Miller and Rose’s (1990) analysis of governing economic life		✓		✓	
Slagmulder (1997)	M	Field study of ten sites at 6 organizations in Belgium. Interviews with 68 people at 10 sites. Various industries (little detail on time, interviews and levels).	C6	Examines alignment (and misalignment) between strategy and capital investment decisions		✓			
Ballantine, Brignall, & Modell (1998)	M	30 interviews in UK National Health Service; 38 interviews in Swedish dental practice. Whole organization. Interviews across organization in the UK and refers to another paper for details in S.	D2	To compare performance measurement and management practices in public health care in two countries. Uses Fitzgerald’s (1991) results and determinants performance measurement framework to analyse gaps.	✓	✓			✓
Burrows & Black (1998)	A	Interviews in the Melbourne (Australia) offices of the Big 6 firms. Data collection September 1995 with six partners of the firms, data was presented back to the partners for comment.	C6	Exploratory study examines profit sharing in Big 6 Australian accounting firms.				✓	
Carr & Tompkins (1998)	M	Examined 71 strategic decisions taken in 71 motor component manufacturers in the UK, G, USA, and J. Data through interviews (senior managers), and factory visits. Part of a broader longitudinal study.	C 71	Examines CAPEX decisions Shank’s (1996) model, Porter’s (1985) value chain, Goold and Campbell (1987) control styles		✓			

Chapman (1998)	A	4 case studies in UK clothing and textile industry. Used social network questionnaire to capture interactions between managers and interviews.	C4	Information, accounting and uncertainty Contingency theory and social network theory		✓			
Chenhall & Langfield-Smith (1998)	M	Major case with interviews and documentation conducted over 6 months in Cleanco (Australian manufacturer). Plus compared to four other case studies from another research project. Little detail on the number of interviews, or levels.	D1	Role of accountants in developing performance measures		✓			
Jacobs (1998)	M	Case study over 27 months (Sept 1993-Dec 1995) in the Independent Practice Association (IPA) in Christchurch, NZ. Repeat visits every 6 months. Interviews with GPs, practice nurses and administrators (no detail on numbers of interviews conducted).	L	Examines the introduction of management accounting practices into the IPA Adopts a middle range approach.					✓
Jönsson (1998)	A	Author uses a videotaped and transcribed to analyse the conversations of a well-functioning top management in a local body in Sweden to show different interpretations.	O	Aligning managerial accounting to managerial work					✓
Llewellyn (1998)	A	Two-stage field study with interviews with 26 social security staff (Scotland, UK) in 1993/4 and further interviews mainly with contract managers in 1995/6.	D1	Examines “whether costing information was integrated into purchasing decisions in the social services”. Theories of boundary work		✓			✓
Morris & Empson (1998)	A	Two exploratory case studies in two professional (accounting and consulting) firms in the UK. Interviews with 50 people in Sun and 28 in Valley.	D2	Examines knowledge management in the professional services sector.					✓
Chow, Harrison, McKinnon, & Wu (1999)	A	Quantitative survey of 52 (50) middle level manufacturing managers from 13 (14) Taiwanese and (Australian) companies. Then interviews with 52 (42) managers.	C 27	Exploratory study examining cultural factors which “may facilitate or impede the sharing of information in the interpersonal communications”					✓
Euske & Riccaboni (1999)	A	Case study 25 months in Credito Italiano, one of Italy’s largest banks (Aug 1994-Sept 1996). Data included 23 hours of interviews, visits, and 51/2 hours telephone conversations with senior management, archival data, etc.	L	Internal and external interdependencies, structure Institutional theory	✓	✓	✓	✓	
Jazayeri & Hopper (1999)	M	Case in a subsidiary of a UK chemical manufacturer. Data gathered over 7 months in two phases 1) pilot 1994-1995 2) 1995-1996. Interviews with 68 employees at all levels, documentation.	D1	Management accounting within world class manufacturing: a case study	✓	✓	✓	✓	✓
Lowe & Doolin (1999)	M	Two year (1994-1996) longitudinal study at Waitako public hospital in NZ. Whole organization and interviews across the levels.	L	Examining casemix accounting systems		✓			✓
Marginson (1999)	M	Case study in Telco (telecommunications company in the UK). Exploratory and over 2 years. Whole organisation. Little specific detail on method and interviews.	L	Budgetary control: two tiered system Theory: management control (Anthony), cybernetic processes; organizational behaviour; contingency theory (see Otley and Berry 1994).		✓		✓	✓
Mia & Clarke (1999)	M	Field study with interviews and questionnaire with 61 business unit managers (manufacturers in Australia).	C 61	Examines the relationship between market intensity, use of MAS information and BU performance.					✓
Perez & Robson (1999)	M	Case in Delta a Spanish subsidiary of a large North American car manufacturer. Researcher worked in the finance department for 2 years of the study. Interviews (15 with organisational members), participant observation (e.g., meetings), informal discussions (finance people), etc.	L	Examines consultation and negotiation in budgetary participation. Theories: hypocrisy, legitimization, de-coupling and ritual.		✓	✓		
Vaivio (1999)	A	Case in UK subsidiary of Uni-lever over 6 months 1992-1993 with 42 interviews (48 hours), observation and documentation with a wide range of people. Consumer products company.	D1	Examines “The Quantified Customer”		✓			✓
Emsley (2000)	A	Research over 18 months spent in a production department with analysis of company data, etc. Plus cross-sectional study with interviews with 47 managers interviewed across 20 firms.	D1	Examined a change to variance analysis and the increased information for organizational feedback					✓

Greenhalgh (2000)	M	Interviews with two members of the management team of a UK SME manufacturer over 18 months	D1	Information and the transnational SME controller Grounded theory		✓	✓		✓
Kloot & Martin (2000)	M	Interviews with 80 people from 7 councils in Victoria, Australia. One-day visit and up to 12 councillors and managers interviewed in each council. Range of people interviewed at each site.	C7	Strategic performance management: A balanced approach to performance management issues in local government	✓	✓			✓
Lapsley & Pallot (2000)	M	Four case studies: two in local authorities in NZ and two in Scotland, UK. Twelve interviews at each site, and interviews with key government officials.	C4	Accounting, management and organizational change: A comparative study of local government Theories of change: new institutionalism; isomorphism (similarity of organizational form).		✓			
Nilsson (2000)	M	Case study, four Swedish corporations at the time of acquisition and 1-2 years later. Interviews conducted in 1995-1997 (62 interviews with 36 interviewees). Standardised research instruments used. Conducted 7-12 interviews in each organization and across levels.	L4	Parenting styles and MSC (strategic planning, etc). Theory: 8 different parenting styles (Gould et al 1994).	✓	✓			
Vámosi (2000)	M	Case study at the Budapest Chemical Works (Hungary) using 33 interviews conducted in 3 visits in 1996. Range of levels interviewed.	D1	Examines management accounting during transition from a command to a market economy (employee takeover in 1993) Theory: Berger and Luckmann's " ideas of social constructions – including their interpretation and application of the concepts externalization, objectivation and internalization		✓			
Collier (2001)	M	Ethnographic and interpretative 4 year study (1995-1999) of a Police constabulary. 52 observations, participant observation and documentation. Interviews across the organization.	L	Financial management – power of accounting Theory: Power and institutional theory		✓	✓	✓	
van Helden, van der Meer-Kooistra, & Scapens (2001)	M	Longitudinal case study (4 years from May 1995 – Dec 1998 and follow-up interviews in 1999), highly integrated steel making organisation. Authors were involved, so a type of action research, but relied on interpretations of the actors. Interviews with controllers (accountants).	L	Transfer pricing and MSC TP models (Eccles, etc) + van der Meer-Kooistra (transaction cost)		✓		✓	
Lee (2001)	A	Case study of Shanghai Sunve Pharmaceutical Corp. Researcher was a consultant to the company on financial restructuring.	O	Examines several models of financial restructuring (profit-orientated) in a Chinese SOE	✓	✓		✓	
Lind (2001)	M	Longitudinal case study – 2 ½ years in one production unit (Gimo plant) of Sandvik. 34 interviews with accountants, 20 production people, other interviews, and observation. Interviews across the organization.	L	Swedish firm implementing World Class Manufacturing.		✓	✓	✓	✓
Lowe (2001)	M	2 year longitudinal study in a NZ regional hospital. Site visits, interviews, meetings, etc. Interviews across the organization.	L	Uses empirics from a case study of casemix accounting system to show how this relates to Actor Network Theory		✓			
Malmi (2001)	M	Field study of 17 Finnish organizations adopting BSC. Interviews with 17 people (business planning, accountants) in Spring 1998.	C 17	Balanced scorecards in Finnish companies		✓	✓	✓	✓
Modell (2001)	M	Data included 21 interviews and documentation mainly during 1999 in a large Norwegian hospital. Range of people interviewed.	D1	Examined performance measurement and institutional processes Neo-institutional sociology and Oliver 1991.		✓			
Parker (2001)	M	Case study over two years 1998-1999. Interviews with 23 officers across the organization, documentation, observation, etc. Plus prior involvement with the Victorian Synod of the Uniting Church. Whole organization. (see Parker, 2002)	L	Examined planning in the church Inductively developed a framework for the organization.		✓			✓
Poon, Pike, & Tjosvold (2001)	M	A field survey with interviews with 64 managers of a Hong Kong public utility. Interviews were mainly structured (used SEM) and conducted by undergraduate students. Critical event method used.	O	Budget participation, goal interdependence and controversy: a study of a Chinese public utility Goal interdependence theory (cooperative, competitive and independent goals). Conflict and controversy literature		✓			
Quattrone & Hopper (2001)	M	Case study over one year (1999-2000). In Think-Pink 23 managers were interviewed and documentation reviewed. In Sister-Act 12	D2	What does organizational change mean? Critical accounting paper; counters prior change theories.	✓				✓

		interviews plus participation in weekly meeting over 3 months. Range of industries, not whole organization, or interviews across. Interviews with UK, US and Belgium managers.							
Seal (2001)	M	Longitudinal case study in Marconi, a highly diversified UK conglomerate. Two year field work. Little detail on number of interviews, etc.	L	MA change and challenge of strategic focus Theories self-referential systems theory; autopoiesis (closed system, responding to the environment according to its own norms)		✓			
Uddin & Hopper (2001)	A	Case study in a soap manufacturing company (PC) in Bangladesh Data gathered over 7 months from February to Sept 1995. Participant observation of one month in the soap factory, 55 interviews with management and 8 with other officials (government, union), plus reports. Seven follow up interviews in 1999.	D1	Examines how the control system changed as the politics in the organisation changed from nationalisation (and part- privatisation) to full privatisation Labour process theory (Burowoy)		✓	✓	✓	✓
Ahrens & Chapman (2002)	M	Longitudinal case study (2 years) in a UK Restaurant chain (200 profit centres) (interviews, observation, documentation). Whole organization and interviews across the levels.	L	Examines performance measurement and accountability practices in a UK restaurant chain. Theory: Giddens (1993) signification, legitimation, and domination.	✓	✓	✓	✓	✓
Collier & Berry (2002)	M	4 diverse organisations. Sub units of larger organisations. Interviewees in each organisation S automotive parts supplier (3); T subsidiary of an unlisted autoparts manufacturing group (5). P Police force (5), and Q a charity (1). There was more than one visit to each organization and some interviews across levels.	C4	Risk management in budgeting. Categorising risk perspectives in budgeting: Scott's 1998 typology, open rational systems encompass rationality, contingency and transaction cost models. Social construction (of risk) Czarnia-Jorges and Jacobsson (1989)		✓	✓		
Cowton & Dopson (2002)	M	11 branch managers interviewed, observation, diary keeping, etc. (no detail on time frame).	O	Management control in a UK automotive distributor. Foucauldian perspective, and Giddens structuration theory.				✓	
Granlund & Malmi (2002)	M	Field study of 10 companies in Finland with 16 interviews (1999-2000), informal discussion and other data. Interviews with accountants, project managers, and IT managers.	C 10	Examine impact of ERPS on MA and control		✓			✓
Kasurinen (2002)	M	Case study (Jan 1997- Sept 1998) with 100 hours of interviewing, documentation, etc. Action research in a Metals group in Finland. No details of interviews, levels, etc.	D1	Examining balanced scorecard implementation in a business unit of a multi-national Finnish organization		✓			
Lillis (2002)	A	Field study – interviews with 36 PC manufacturing managers (mainly from different organizations) in Victoria. Nudist was used.	C 36	Performance measures and profit centre strategy in manufacturing organizations.		✓			
Lin & Yu (2002)	M	Field study in 1999-2000, 3 visits of 2-5 days stay interviewing 18 managers and accounting staff, plus two group interviews and documentary review	D1	Examined the responsibility cost control system in the Han Dan iron and Steel Company in China Theory: Institutional isomorphism	✓	✓	✓	✓	
Northcott & Llewellyn (2002)	M	Documents and 6 cases at NHS trust sites (UK hospitals). Interviews with a range of people at each site during November 2001 and February 2002, plus a survey.	C6	Benchmarking exercise across UK hospitals and the use of “league tables”		✓			
Parker (2002)	M	Case study used grounded theory. See Parker 2001.	L	Budgeting incrementalism in a Christian bureaucracy (Part II)	✓	✓	✓		✓
Vosselman (2002)	M	Case at Leiden University conducted in 1995. Interviews with several people and documentation. Little detail on the number and who was interviewed.	O	Examination of restructuring at Leiden University during 1994-1995. Theories: Transaction cost economics/theory of the firm (economics). MSC – Speckle; Anthony, cybernetic, closed system.	✓	✓			
Bhimani (2003)	A	Interviews (early 1995 and mid-1998), documentation and questionnaire (pre and post implementation of MAS) in Fibre Optics a division of Siemens in Germany. Numbers or who was interviewed?	L	MA change and organisational culture Competing values model of organisational culture		✓			
van den Bogaard & Spekél (2003) order	M	Case examining restructuring at Shell, one author worked at Hoogvliet site of a chemical company in The Netherlands during the restructuring. Conducted sometime around 1998-1999.	D1	Examine strategy and control Theory: Transaction cost economics		✓			
Johansson & Balvinsdottir	M	Longitudinal field study (4 years) in a consultancy organization and action research in a manufacturer (one year).No details on number of	L	How trust affects performance evaluation Theory – trust and institutional processes				✓	

(2003)		interviews, or levels								
Kurunmaki, Lapsley, & Melia (2003)	M	Interviews with 30 people in 4 intensive care units in UK and Finland, plus documentation. Interviews across the organization.	C4	Accountingization v. legitimization: a comparative study of the use of accounting information in intensive care Institutional theory (legitimization) and Instrumental view of organizations Interactionism approach.		✓				
Malmi & Ikäheimo (2003)	M	6 Finnish orgs, 15 interviewees. Diverse range of industries	C6	Application of value-based techniques diversity in practice Value-based framework (Ittner and Larcker, 2001)	✓	✓	✓	✓	✓	
Perera, McKinnon, & Harrison (2003)	M	Longitudinal case study – 10 years (1991-2000) but interviews 1997-2000 (semi structured interviews with 27 respondents (interviews across the organization), and a follow-up with 7 people). Interviews April – June 1997, and June – September 2000. Energy is a government trading organization in Australia.	L	Diffusion of Transfer pricing innovation – commercialisation for government trading enterprise. Theory: diffusion of innovation theory; transfer price choice theory		✓		✓	✓	
Roslender & Hart (2003)	M	Field study into 10 organisations in 1998-1999 (usually two interviewed management accountant and a marketing person). Little detail on interviews.	C 10	Exploratory study into Strategic management accounting practices = no theory		✓				
Saravanamuthu & Tinker (2003)	A	Longitudinal study 1992-1994 in an automotive and parts manufacturing company in Australia. Data includes analysis of operations over 5 months, review of internal documentation, observation of the shop floor and interviews with 20 managers and deputy managers from three sub-units (interviews with shop-floor workers were not permitted).	L	How management uses performance measures to control the labor process. Marx's theory of value.	✓	✓	✓			✓
Subramaniam and Mia (2003)	M	Survey to 250 metal, food and beverage firms in Australia (51% responded, from 37 companies), and post-survey interviews with 6 managers from 3 firms.	C3	Examine work-related values, budget emphasis and organisational commitment Based on empirical work: RAPM.		✓		✓		
Alvesson & Karreman (in press)	A	52 interviews with 45 people from all parts of the organization, observations and documents. Time? Interviews across the organization. Nordic subsidiary of a Global consultancy firm.	D1	Variety of management controls in a Global management consultancy firm Organizational culture, Technocratic (formal, bureaucratic) and socio-ideological (informal) forms of control	✓	✓	✓	✓	✓	
Ezzamel, Willmott, & Worthington (in press)	A	Longitudinal and based on the experience of one of the authors over 20 years (1979-1998) using participant observation, interviews (over 80), documents. Range of people interviewed. UK manufacturer.	L	Examining the role of accounting in management-labour relations in a “factory with a problem”. Labour process theory	✓	✓				
Leitner & Warden (in press)	M	Based on experiences of one of the authors involved in the IC reporting development team in two research organisations ARC (Austria) and DLR (Germany) over 4 years. Longitudinal. No other detail on the method.	L	Examining intellectual capital (IC) systems in two research organisations	✓	✓	✓			
McNamara, Baxter, & Chua (in press)	M	Field study from June-November 2002, 17 interviews, formal meetings, conference and participant observation over 40 days. In consumer food products company in Australia.	D1	Examined the making and managing organisational knowledge(s) in Foodco a fast moving consumer goods company (Sydney)						✓
O'Connor, Chow, & Wu (in press)	A	Survey of 82 SOE manufacturing managers (in 1999) and 12 interviews in six organizations in 1997.	C6	Examined the adoption of management accounting/control practices in SOEs in China Institutional and agency theory	✓	✓				
* Note: The field studies are in date (then author order). J indicates journal (A= AOS, M= MAR), research method, and this is followed by a column which shows the classification of the depth of the methods (e.g., l= longitudinal, d = some depth, c= cross sectional, and o= other). The numbers indicate the number of organizations studies in a particular paper. This is followed by Otley's (1999) five questions.										