

***PERFORMANCE ON THE RIGHT HAND SIDE:  
ORGANIZATIONAL PERFORMANCE AS AN INDEPENDENT VARIABLE***

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**Abstract**

Organizational performance in most survey-based management control research appears on the “left hand side of the equation” as a dependent variable. The objective typically being to identify, predict or model the effects of management control variables presumed to be causally antecedent. However, the effects of organizational performance acting as an *independent* variable has received surprisingly little attention in management control research. We argue that without taking into consideration the recursive effects of organizational performance, such models are likely to be incomplete and provide a distorted picture of the true causal structure of performance. Based on a questionnaire survey, and follow-up interviews with CEOs and senior executives in Australian Not-for-profit (NFP) organizations, our quantitative results do not support this contention. Our qualitative results however, reveal broader considerations that may explain this finding. We discuss the theoretical implications of these findings, and propose directions for further research in this area.

*Keywords:* organizational performance; management control systems (MCS); informal control.

## INTRODUCTION

Attempting to improve organizational performance or effectiveness<sup>1</sup> and the search for its causal structure represents one of the most common themes in survey-based, management control research (see, for example, Govindarajan and Gupta, 1985; Govindarajan, 1988; Govindarajan and Fisher, 1990; Perera, Harrison and Poole, 1997; Ittner and Larcker, 1997, 1998; Chenhall and Langfield-Smith, 1998; Abernethy and Brownell, 1999; Baines and Langfield-Smith, 2003; Bisbe and Otley, 2004; Henri, 2006; Widener, 2007). These investigations have typically followed a contingency perspective, in which performance is presented as a dependent variable, positioned on the “left hand side of the equation”, as a means for determining the appropriate fit between various management control systems (MCS) and other contextual variables (Otley, 1980; Merchant and Simons, 1986; Langfield-Smith, 1997; Chenhall, 2003). It is rare however, for studies to investigate how organizational performance in previous periods might affect MCS and future performance outcomes.

In the management control literature, scholars have recognized that organizational performance may assume the role of an independent variable (Otley, 1978; Merchant, 1985), through the likely existence of bidirectional relationships (Van der Stede, 2000; Chenhall, 2003) and reverse causation (Otley, 1980; Langfield-Smith, 1997). Prior organizational performance has been demonstrated to be an important element in feedback loops that facilitate the on-going development or refinement of strategy (Kaplan and Norton, 1992), organizational learning (Kloot, 1997; Buckmaster, 1999), and performance measurement and evaluation (Behn, 2003), and an evaluation of immediate past organizational performance is also necessary to direct the ways in which controls are subsequently used (Brooks, 2002).

Despite these theoretical observations, the management control literature provides limited empirical evidence of the role of organizational performance as an independent variable. We consider this an important omission as, in failing to recognise the influence of prior organizational performance on predictor variables, any model attempting to predict or explain how subsequent organizational performance may be enhanced is likely to be under-specified.

This study is informed by questionnaire and interview data collected from 182 Australian not-for-profit organizations (NFPs). In exploring the influence of prior organizational performance on the use of MCS in NFPs, the current study responds to the call of Nixon and Burns (2005) to address the gap between the management control literature and control practice. It also acknowledges Chenhall's (2003, p) recognition of “the need for more (MCS) research into service and NFP organizations as these entities become increasingly important within most economies”. There is ample evidence of the economic and social importance of NFPs in most western economies<sup>2</sup> and the significance of performance and control have been argued to be

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<sup>1</sup>Scholars often use “effectiveness” and “performance” interchangeably to describe the same phenomenon: the outcome of organizational activities (Selden and Sowa, 2004, p. 395). No distinction is made between the terms in this study, and the term “performance” is used. For a more detailed discussion comparing and contrasting these terms, see Henri (2004).

<sup>2</sup> For example, in the UK, over 22 million adults were involved in formal volunteering in the nonprofit sector in 2007, and the economic value of volunteering was estimated to be approximately £171 billion per year (UK Office

even greater in NFPs than in their commercial counterparts (Parker, 2002). NFPs now operate in an environment where they compete for resources and are required to demonstrate and improve their efficiency and effectiveness (Rojas, 2000), as funding and government agencies demand increased accountability (Gray, Bebbington, and Collison, 2006; Unerman and O'Dwyer, 2006; O'Dwyer and Unerman, 2008; Chenhall, Hall and Smith, 2009).

We argue that the current study contributes to the management control literature in two respects. First, it adds much needed empirical evidence in examining what, until now, has largely been theoretical speculation about the role of organizational performance as an independent variable. Second, as the sector within which an organization operates represents an important contextual variable (Abernethy and Stoelwinder, 1991), our study provides insights into the relationship between management control and performance in NFP organizations. The remainder of this paper is structured as follows. We begin with identifying recent studies from the management accounting, strategic management and not-for-profit literatures that investigate organizational performance, with specific attention directed to the causal relationships upon which these investigations have been predicated. We then consider the implications of organizational performance as an antecedent to the use of MCS. Examination of this relationship in NFPs is sparse, and the management control literature provides limited empirical evidence of organizational performance as an antecedent to the use of MCS. Nevertheless, the significance of organizational performance as an independent variable has been recognized in the literature (see, Otley, 1980; Otley and Berry, 1980; Langfield-Smith, 1997; Chenhall, 2003) and our hypotheses are primarily generated *a priori*, from theoretical arguments drawn from this literature. We then outline our research method, detailing the sample, the measurement of variables and our approach to both the quantitative and qualitative analysis. Next, we describe our results, and follow with a discussion of the findings relating to our hypotheses. Finally, we identify the limitations of the study and suggest areas for future research.

## **ORGANIZATIONAL PERFORMANCE AND MCS**

Investigating organizational performance as a function of the use of management control systems (alone, or in combination with other independent variables) is a common area of management control research (see, for example: Abernethy and Brownell, 1999; Davila, 2000; Kober, Ng and Paul, 2003, 2007; Bisbe and Otley, 2004; Henri, 2006; Widener, 2007). In the majority of these studies, causal direction is one-way, focusing on the extent to which individual or a combination of MCS or MCS-related independent variables produce variations in the dependent variable, organizational performance. This is not surprising given the traditional role of MCS is to measure and evaluate organizational performance (Abernethy and Brownell, 1999; Chenhall, 2003). Moreover, survey-based MCS contingency research has prescribed some measure of organizational performance as a necessary dependent variable, as it provides the means for determining the appropriate fit between MCS

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for National Statistics, 2009). In 2006, there were over 1.25 million U.S. not-for-profit organizations with assets of \$US2.5 trillion (US Internal Revenue Service, 2006). In Australia, there are over 58,000 nonprofit organizations, employing around 890,000 people (full-time-equivalent),

and other contextual variables (Otley, 1980; Merchant and Simons, 1986; Langfield-Smith, 1997; Chenhall, 2003).

“The control-performance link has been notoriously problematic in the management control literature” (Van der Stede, 2000, p. 614) and empirical evidence supporting a direct relationship between the use of MCS and performance has not been found in recent studies (Abernethy and Brownell, 1999; Bisbe and Otley, 2004; Henri, 2006). Management control research, however, provides numerous examples of how the use of MCS indirectly influences organizational performance (see for example, Mundy, 2009; Kober, et al., 2007; Widener, 2007; Henri, 2006; and, Bisbe and Otley, 2004). These studies have adopted the ‘levers of control’ (LOC) framework advanced by Simons (1995) as an analytic framework.

The LOC framework suggests that management control could be understood as a combination of four control systems or ‘levers of control’: beliefs systems, boundary systems, diagnostic control systems, and interactive control systems, which work simultaneously but for different purposes within organizations. *Beliefs systems* are used to enhance core values related to business strategy and to inspire the search for new opportunities in line with these values. *Boundary systems* reduce risks by setting limits to strategically undesirable behaviours. *Diagnostic control systems* communicate and monitor critical success factors. *Interactive control systems* are used to identify strategic uncertainties and develop strategic responses to a changing environment. In particular, the diagnostic and interactive uses of control operate both individually and simultaneously (Abernethy and Brownell, 1999). The interaction between diagnostic and interactive uses of control has been argued to be critical in creating and facilitating dynamic tension (Henri, 2006), which serves to reinforce and intensify their individual effects (Simons, 1995), and which has been demonstrated to positively influence organizational performance (Henri, 2006; Widener, 2007), indirectly. However, an organisation’s inability to balance different uses of MCS is associated with slower decision-making, wasted resources, instability and, ultimately, lower performance (Bisbe, et al., 2006; Henri, 2006). For example, an excessive use of controls diagnostically can have a negative influence on performance by constraining innovation and risk taking, resulting in stagnation, loss of energy and declining morale (Chenhall and Morris, 1991). Conversely, insufficient diagnostic use of controls to highlight effectiveness issues can produce a loss of direction, wasted energy and a disruption of continuity (Chenhall and Morris, 1991). Similarly, too great a focus on interactive processes can de-stabilise an organisation by generating continual change or by preventing employees’ from carrying out their activities (Dent, 1991). Conversely, the interactive use of controls may be underutilised by focusing on managing employee relations rather than on constructive dialogue, that challenges existing assumptions (Mundy, 2009; Bisbe, Batista-Foguet and Chenhall, 2006; Speklé, 2001). Thus, the over-use or under-use of both diagnostic and interactive controls has implications that are likely to affect performance.

In spite of this accumulated body of knowledge relating the ways in which MCS influence organizational performance, the reverse relationship in which organizational performance can be considered an independent variable, influencing the way in which control systems are used, has been recognized but largely untested in the management control literature. For example, over three decades ago Otley and Berry (1980, p.236)

argued, "... control can only exist when knowledge of outcomes is available; with no feedback on actual performance, improvement is possible only by chance". Langfield-Smith (1997, p.226) recognized that "...the adoption of certain controls might be in response to low (or high) organizational performance", and Shields, Deng and Kato (2000, p.198) suggested that "models which include prior performance as an antecedent to MCS would provide a more complete understanding of the effects of control systems". In the light of this theoretical speculation, it is surprising that there is so little *empirical* evidence investigating the effect of organizational performance, as an independent variable, on control systems.

#### *Towards a more complete understanding of causality*

In a review of 275 studies published in six leading management accounting journals between 1967 and 2001, Luft and Shields (2003) found very few bidirectional models examining organizational performance. They warned that "Unidirectional models can limit understanding when they make the independent variables look like levers that can be pulled without generating recoil from the other end of the lever" Luft and Shields (2003, p. 185). Likewise, in a review of top strategic management journals over the period, 1993-1995, March and Sutton (1997) found a minority of studies investigated organizational performance as an independent variable. They argued that simple unidirectional models of organizational performance are likely to fail because they either ignore or misrepresent causal complexities surrounding organizational performance. This is due, in part, to the tautological thinking upon which such models are predicated. In modeling the predictors of organizational performance, the researcher makes assumptions about the causal structure. For example, MCS are assumed to influence organizational performance. While precedents are available from prior empirical studies to suggest a direct or indirect causal relationship between MCS and organizational performance (Henri, 2006; Widener, 2007), the unidirectional assumption about this relationship is primarily theory-driven and cannot be imputed from a cross-sectional survey methodology. Data analysis can confirm the strength of association between the independent variable, (MCS), and dependent variable (organizational performance) but it, can only assess the strength of the causal relationship on the assumption that the causal structure is correctly specified in the first place. As such, the potential for reverse causality arising from the existence of unidirectional links in the opposite direction cannot be ruled out (Perera, et al., 1997; Luft and Shields, 2003).

Although modeling bidirectional relationships may overcome this limitation, understanding bidirectional causation requires knowledge of causal intervals (i.e., the length of time from cause to effect). Bidirectional relationships can be simultaneously determined or related cyclically (Chenhall, 2003), however it is difficult to conceive of *any* simultaneous relationship involving organizational performance and MCS. Because of their time-dependent nature, bidirectional relationships involving organizational performance and MCS are more likely to be cyclical. According to Chenhall (2003, p. 156) "...MCS determines outcomes, then outcomes determine MCS, followed by MCS effecting outcomes and so on." Although longitudinal studies enable observations of changes over time, cross-sectional survey research by its very nature is generally able to examine and generalize at only one stage of the cycle (Chenhall, 2003). Hence, bidirectional modelling of the relationship between organizational performance and MCS, although appealing, is likely to be problematic using survey methods.

It is possible however, to use survey methods to investigate the reverse causation between organizational performance and MCS. Although testing this relationship involves a unidirectional approach and is subject to the same limitations discussed above, it does recognize reverse causality, which allows a more complete explanation of organizational performance, by providing an opportunity to assess the ways in which performance might act as an antecedent to control. To this end, we present the following theoretical arguments for how organizational performance in a prior period might influence the ways in which control systems are used.

### **Hypothesis development – the influence of organizational performance on management control systems**

Chenhall (2003) argued that a cyclical bidirectional relationship is likely to exist between organizational performance and MCS and, therefore, theoretical arguments for the direction of the relationship may depend on the stage of the life cycle. The influence of MCS on organizational performance represents a particular stage of this cycle. The reverse relationship, where *management control* is influenced by organizational performance would necessarily represent the *subsequent* stage of the cycle. If in the initial stage of the cycle, an organization achieves a level of performance that is considered “acceptable”, then in the subsequent stage of the cycle, adaptive behaviour can be expected to decline (Greve, 1998). This decline occurs because the organization may become complacent or see no necessity to radically alter established means of control that have resulted in previously successful performance. In colloquial terms, managers may believe that, “if it ain’t broke, don’t fix it”. In such a scenario, the opportunities to increase performance in the subsequent stage of the cycle through the introduction of new controls, or the different use of existing controls, may be viewed as discretionary rather than mandatory. We contend that in such circumstances, existing management controls are more likely to be maintained, as higher performing organizations see no impetus or motivation to increase their use of MCS, and are likely to maintain the status quo.

In contrast, organizations that have not achieved what they consider to be “acceptable” performance are likely to be concerned primarily about issues that affect their short-term results (Van der Stede, 2000), as immediate actions may be necessary to bring about an urgent recovery of this level of performance (Merchant and Manzoni, 1989). Thus, performance at less than acceptable levels in the initial stage of the cycle may provide a motivation to take action in the subsequent stage of the cycle. In these circumstances, control and decision making processes will tend to be more comprehensive than in organizations that are performing to expectations (Fredrickson 1985). When faced with unacceptable performance in the initial stage of the cycle, we contend that in the subsequent stage, organizations are more likely to increase their attention to existing controls (Widener, 2007), and to be more willing to use different means of control to learn of new strategic opportunities, in order to improve results.

Based on these lines of argument then, it can be expected that a greater emphasis on the use of control in both a diagnostic and an interactive manner is a likely response to organizational performance that is perceived to be below par in the immediately preceding period. For example, in their role of comparing actual performance against pre-set targets, the diagnostic use of controls enables managers to identify exceptions

and deviations from plans, ascertain the extent to which targets are being achieved, and monitor critical success factors (Simons, 1995). Organizational changes are more likely when performance falls below expectations (Greve, 2002), and more rigid controls are pursued when past performance has been below expectations (Van der Stede, 2000). Thus, the diagnostic use of controls represent implicit responses to prior levels of performance in prescribing corrective action as a result of feedback received about performance (Fisher, 1995).

In the same way, the increased use of interactive controls as a specific response to performance failing to meet expectations appears self-evident. The debate and dialogue between managers and subordinates at different levels of the organisation, which is an intrinsic feature of the use of controls interactively, is (presumably) a means to an end, rather than an end in itself. Logic suggests that this end is likely to be in some way tied to improving performance outcomes. If this line of reasoning is valid, then performance is not only an integral precursor to the use of controls in an interactive fashion, but it is conceivably the *most* significant trigger to the use of controls interactively. Although not explicitly examining the link between prior performance and the use of controls interactively, the findings of recent studies are consistent with this argument. For example, Widener (2007) suggests the emphasis placed on the interactive use of controls is driven by the extent to which organizations face strategic risk and uncertainty, which in turn, influence performance. By extension, and based on the cyclical and on-going nature of the use of controls, it is conceivable that performance which is below acceptable or expected levels may result in an increase in the interactive use of control as a means by which such strategic risks and uncertainties may be better identified and addressed in order to redress what is regarded as unsatisfactory performance. Bisbe and Otley (2004, p.727) suggest it is plausible that the interactive use of controls provides direction to the organization 'by signalling preferences for search, indicating those acceptable courses of action that are consistent with the overall business strategy, and providing the basis for selecting those initiatives that maximize the impact on performance'. If so, it is likely that the use of interactive control in this context is initiated by recognition of the potential for performance enhancement.

#### *Organizational performance and management control in the not-for-profit sector*

NFP researchers have argued that the characteristics of organizations in this sector, such as their unique governance structure, financial and legal status, distinct culture, and goals based on social values, make discussions about how to improve organizational performance in NFPs more complex than that in commercial organizations (Speckbacher, 2003; Moore, 2000). However, NFPs face the same economic pressures to survive as any business (Clohesy, 2003), operating within an increasingly competitive environment (Speckbacher, 2003), with the ever present threat of short-term resource constraints (Parker, 2001), and are subject to demands to prove and improve their effectiveness (Stone, Bigelow and Crittenden, 1999). Over the past twenty years, NFPs have also been subject to a growing demand for transparency and public accountability (Christensen and Mohr, 2003; Flack and Ryan, 2003) to avoid charges of inefficiency and ineffectiveness (Salamon, 1999). This brings into sharp focus the increasingly important role of MCS and performance in NFPs and, by extension, of MCS in influencing the performance of NFPs. MCS are central to NFPs in their efforts to achieve or maintain their legitimacy in the eyes of

their stakeholders (Herman and Renz, 2008), and to demonstrate they are pursuing the 'right' objectives in the 'right' way (Herman and Renz, 1999). The NFP sector therefore, offers a rich environment for developing and testing theory relating to organizational performance and MCS, however, there has been little empirical research into the use of MCS in a NFP context.

Baraldi (1998) used questionnaire-based interviews of top managers from 76 NFPs in Italy to explore the nature of their MCS. He found that the MCS used in these organizations differed significantly from those in commercial firms, and that their use did not fit the increasing complexity of these organizations. Baraldi's study indicates the dynamic environment within which NFPs operate, making them well suited to ICS, although there was little evidence of these ICS in practice. DCS existed but seemed limited in their effectiveness because of the complexity of the environment and problems in reflecting multiple, complex, and sometimes-conflicting objectives. In contrast, Parker (2001, 2002) explored the strategic planning and control processes in a large religious organization in Australia and found 'an incremental budgetary mélange' which confirmed the existence of DCS but not a systematic or consistent use of ICS. From the limited evidence available, it seems that, although no clear conclusion can be drawn about their effectiveness, the diagnostic use of controls appear to play a role in NFPs. The evidence concerning the use of ICS is less convincing.

#### *Moving organizational performance to the right hand side*

Summarising our discussion, we conclude that the concepts of organizational performance and management control are relevant to the NFP sector. We contend that organizational performance that is perceived by NFPs as "acceptable" in a *prior* period will not provide the motivation for any significant change in the use of MCS in a subsequent period. These organizations are likely to continue their established means of using control systems, at least in the subsequent period. Conversely, organizational performance that is perceived to be "below expectations" in a prior period provides an incentive for managers to change the ways in which they use controls in the subsequent period. This is likely to be reflected in a change in the emphasis placed on existing controls in that period, and may even result in the introduction of new control measures in an effort to improve performance outcomes. To empirically assess these theory-based arguments, the following hypotheses are presented:

*H1: The lower the perceived performance of a NFP in any given period, the greater its emphasis on diagnostic controls in the subsequent period.*

*H2: The lower the perceived performance of a NFP in any given period, the greater its emphasis on interactive controls in the subsequent period.*

## RESEARCH METHOD

To explore the relationship between organizational performance and MCS we used a mixed methods approach, based on a questionnaire survey of 401 NFP managers and follow-up interviews with 32 questionnaire respondents.<sup>3</sup>

### *Questionnaire design*

The questionnaire, shown in *Appendix A*, consisted of demographic data, (including position title of respondent, tenure of position, industry and employee numbers) and two sections comprising questions that measured MCS and organizational performance. The section related to MCS sought information about the various uses of MCS and was based on the instrument used by Henri (2006). The performance section focused on respondents' perceptions of the performance of the organization over the past three years in terms of the extent to which its goals have been attained, and its ability to acquire necessary resources. This section comprised two questions, adapted from the instrument developed by Nobbie and Brudney (2003) to operationalise NFP performance.

The survey instrument was pilot tested, which resulted in minor changes to the wording and presentation of the questionnaire.

### *Sample selection*

The potential data set was established via an initial identification of 401 Australian NFP organizations, selected randomly from a database comprising 48,113 charities (as defined by Australian Taxation Office, *Australian Business Number database*, 2005), and 2,665 incorporated companies limited by guarantee (Australian Corporate Update July 2005). The organizations were drawn from all industry sectors listed in the Australian Bureau of Statistics, *Non-profit Institutions Satellite Account*, *Australian National Accounts 1999/2000*, and across all states of Australia.

### *Questionnaire administration and response rates*

The questionnaire was sent to the most senior officer (CEO, Chief Executive, Director, General Manager, Public Officer, Administrator, or Principal) of the NFP organization. Following an initial response of 54 questionnaire returns, telephone follow-up one week later produced a further 128 usable responses. The 182 completed questionnaires represented a response rate of 46 per cent. A comparison of the mean score of each measured variable for the first and last 20% of returns produced no evidence of any obvious non-response bias.

Two methodological limitations associated with research using survey-based data were addressed in the design of this study. First, the distribution of industry classifications of NFPs as reported by the Australian Bureau of Statistics (2008) was compared with the completed questionnaires. A  $\chi^2$  test indicated that two industry sectors within the sample (Health and Business and Professional Associations and Trade Unions) were marginally over-represented, and three sectors were marginally

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<sup>3</sup> The questionnaire and subsequent interviews reported in the current study were part of a larger study that investigated the relationship between management control and strategy in the NFP sector (Tucker, Thorne and Gurd, 2009).

under-represented (Education and Research, Social Services, and Culture and Recreation). Consequently, caution is required in generalising the results of this study across all NFP industry classifications. Descriptive statistics for demographic characteristics of the sample are summarized in *Appendix B*.

Second, the study was operationalized to control for the potential effects of organizational size (Ittner, Larker and Randall, 2003). Using the number of full-time equivalent staff as a proxy for size, and in order to avoid omitted variable bias, a comparison of means of all items representing MCS use as well as organizational performance was undertaken between the five industry strata of NFPs (as shown in *Appendix B*). Independent samples t-tests did not reflect significant differences, suggesting the absence of any obvious bias relating to organizational size<sup>4</sup>. The apparent non-relevance of size is consistent with other survey-based MCS-strategy studies (see: Abernethy and Brownell, 1999; Bouwens and Abernethy, 2000; Hoque and James, 2000; Ittner, et. al., 2003; Bisbe and Otley, 2004).

### *Measurement of Constructs*

The MCS construct comprised 11 questions, measured on a 7-point Likert-type scale to capture the extent (1=low to 7=high) to which particular organizational practices contributed to the diagnostic use of controls (DCS) (four questions) and interactive use of controls (ICS) (seven questions). The organizational performance construct was also measured using a 7-point Likert-type scale, assessing the extent (1=low to 7=high) to which respondents believed that, over the past three years, the goals of their organization had been achieved and the extent to which the organization had been able to able to acquire necessary resources. Variables and their codes are presented in *Appendix C*.

Following Govindarajan (1984) and others (Govindarajan and Gupta, 1985; Abernethy and Stoelwinder, 1991; Abernethy and Brownell, 1999) we captured performance as a relative rather than an absolute measure. We scored perceived organizational performance as the mean of the responses to the two questions (Perera, et al., (1997). The performance of NFPs scoring above the mean was designated “high”, whilst the performance of NFPs scoring below the mean was designated as “low”. This overcomes some of the measurement difficulties associated with a cross-sectional sample where organizational performance may be affected by other factors (Govindarajan, 1984), and controls for possible leniency bias (Chenhall and Brownell, 1988). Requesting respondents to rate organizational performance in prior periods represents a retrospective approach to our study. Such an approach, although infrequent, has been adopted previously in cross sectional management control research as a means by which the level of particular variables over time may be captured (see, Kober, et al., 2007).

Descriptive statistics are provided in *Appendix D*. The scales were constructed by averaging the responses to the questions about DCS, ICS and Performance. Reliability tests were conducted for each scale and the Cronbach alpha measures were 0.90 for diagnostic control, 0.89 for interactive control and 0.73 for organizational performance. These all exceed the minimum value of 0.70, which is usually

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<sup>4</sup> As will be discussed within the Results section, the interview data clearly and effectively points to the veracity of the survey results and support the non-inclusion of this variables in the analysis,

considered acceptable (Nunnally, 1978). The construct validity of the measure was examined using factor analysis . A single factor was extracted which accounted for 51% of the variance, with all items achieving factor loadings greater than 0.50 providing evidence of a fair level of construct validity (Hair, Black, Babin, Anderson, and Tatham, 2006).

### *Interview questions*

At the end of the questionnaire, respondents were asked to indicate whether they would be willing to participate in the interview phase. Interviews were held with representatives of 32 NFPs, who volunteered from the questionnaire respondent group. The interviews were semi-structured and the themes explored in the interviews included:

- What the term, “Management Control” means to interviewees
- The ways in which control is used within interviewees’ organization
- The extent to which interviewees personally monitor rather than delegate the monitoring of control measures
- What the term, “Performance” means to interviewees
- How performance is defined within the organization
- How control was used to enhance performance
- How performance influenced the use of controls

Interviewees were encouraged to discuss broader aspects of control as it related to organizational performance, and performance as it related to control in their respective organizations. We necessarily relied on participants’ recall and memory of organizational performance in a previous time period. While this enabled participants to ‘look back’ and evaluate organizational performance in a previous period, they were doing so with the benefit of hindsight and this could have consciously or subconsciously affected their recall of events. In the interviews, we stressed this point as a means of controlling for, or mitigating distortions that might eventuate as a result.

Each interview lasted between one and two hours. All interviews were audio recorded and supplementary notes were taken by the interviewer during, and immediately after each interview. In common with other forms of data analysis, the process we employed involved data reduction or summarization, classification and interpretation. The interview data was analysed with the aid of the software package, NVivo (version 7). This enabled the rapid retrieval of specific quotes based on various search criteria. The contents of interview transcripts were organized to focus on the variables as well as the relationships between the variables: MCS use and organizational performance. The transcription enabled us to identify patterns in the explanations provided by interviewees, and to draw out both common, as well as unique themes.

## **RESULTS**

In this section, we present the results of the quantitative analysis, and then offer possible explanations of these results from the insights gained from our interviews.

*Questionnaire results*

As this study was exploratory, we used simple inferential statistics to examine the relationship between perceived organizational performance and the use of MCS. We undertook independent samples t-tests (one-tailed) to test the emphasis on the diagnostic use of controls and interactive use of controls, for NFPs with low and high-perceived performance in the preceding period. The t-values, shown in *Table 1*, did not indicate a significant difference between the mean scores for both the diagnostic use of control and the interactive use of control and NFPs with low and high-perceived performance. This leads to the rejection of both H1 and H2.

**\*\*\* INSERT TABLE 1 HERE \*\*\***

*Table 1:* Diagnostic and interactive use of controls for low and high performing NFPs

	Group 1	Group 2	<i>t-value (sig)*</i>
	Low Perceived Performance	High Perceived Performance	
	( <i>n=77</i> )	( <i>n=105</i> )	
	Mean (SD)	Mean (SD)	
Diagnostic use of control	4.27 (1.54)	4.26 (1.36)	0.07 (0.471)
Interactive use of control	5.09 (1.16)	5.07 (1.09)	0.18 (0.120)

\* The significance tests are one- tailed since the tests are for directional hypotheses.

*Interview results*

The analysis of interview data converged to four potential explanations for the rejection of our hypotheses: the significance of strategic planning; the long-term nature of organizational performance; the prevalence of informal control; and the importance of transparency and accountability. *Table 2* provides illustrative quotes associated with each of these potential explanations. The implications of these themes for the hypotheses are discussed below.

**\*\*\* INSERT TABLE 2 HERE \*\*\***



Table 2. *Themes from the interviews - Illustrative quotes*

***The significance of strategic planning***

“At the beginning of our strategic planning cycle our starting point is to compare what we achieved in terms of income, projects implemented, clients served and other operational measures with the resources we used. All this information comes directly from the system. This comparison between budget and actual is central to our self-assessment when it comes to modifying our strategic direction, going forward. If changes are needed to the way we monitor things, or what we monitor, it’s tabled, discussed and decided on at the next round of strategic planning”.

*(CEO, Business and Professional Organizations or Trade Unions).*

“We report on very defined operational areas – our programs are funded and milestones and targets are very clear. This is all included in our strategic planning document. When we revise our plan, that’s where we can (and do) take a long, hard look at what we’ve done, what we’ve achieved and what we need to better control. These are all included in our revised strategic plan”. *(CEO, Health).*

***The long-term nature of organizational performance***

“As Einstein said, not everything that can be measured, counts... and not everything that counts can be measured”.

*(CEO, Business and Professional Organizations or Trade Unions).*

“What it’s really all about is to see how we have changed the life of individuals – and I don’t know how you measure that – at least in my lifetime”.

*(Managing Director, Social Services).*

“Our work is generational...the true test of our effectiveness, or how well we’ve performed, will only be seen in the future”.

*(Headmaster, Education).*

“This trend about being more like the business sector is really concerning. We’re not like the business sector, we’re quite different. Our reason for existing isn’t to make money, it’s to help people. Therefore, to look at the world like a business just isn’t appropriate. Results of the work we do probably won’t be seen for 10, 20 or 30 years. Measuring that is hard, but that’s what we try and do through our systems”.

*(CEO, Education).*

“...the poor will always be with us...”. *(Coordinator, Social Services).*

### ***The prevalence of informal control***

“When it comes to control, but it’s not about me being a control freak – it’s a way to ensure we’re all singing from the same song sheet, and that everyone’s in tune. Guess you could say I’m like a conductor”.

*(CEO, Business and Professional Organizations or Trade Unions).*

“People think that the role of the CEO is to give directions and tell people what to do. That’s pretty wide of the mark – if you are looking to gain commitment from staff, or from the Board, you really need to spend a lot of time lobbying, negotiating and selling – it’s still control, but you can’t be seen to be a dictator”.

*(Coordinator, Social Services).*

“I don’t just wait for the (financial and operating) results to come out before taking action. I deliberately quiz my managers on how implementation is going and if there are any areas in which we might be exposed. I do this on a regular basis, and I focus my attention on those areas where we might fall over”.

*(CEO, Business and Professional Organizations or Trade Unions).*

“Most of the business is done in the corridor”. *(Executive Director, Health).*

“In this position, you need a balanced view of what’s going on. You can’t get that sitting in an office. I get the majority of the information I need by getting out there and talking and listening to staff, Board members and people who have used our service”.

*(Finance and Business Manager, Health).*

“...we haven’t got time to call meetings, develop agendas, take minutes, and all that other stuff – you just don’t have that luxury in the not-for-profit sector – we need to get things done, and get them done quickly. You achieve much more through a five minute chat in someone’s office or over a coffee, than by calling a meeting or writing a report”.

*(Director, Health).*

### ***The importance of transparency and accountability***

“Not-for-Profit organizations such as ours need to realise we are competing in the real world. We need to operate like a business, on business principles, and demonstrate accountability”.

*(Executive Director, Social Services).*

“Just because we don’t exist to make a profit doesn’t mean we shouldn’t be accountable. Donors, members, the general public all need to know how and why we allocate our resources. We’re stewards of funds in the coffers. We have to be transparent – there’s no question about it”.

*(CEO, Health).*

“I keep abreast of things by meeting with whoever is involved in a particular issue – whether it’s about a complaint, a legal matter, how we manage and develop our services, or a personal staff issue – my aim is to give advice, but also to make sure I’m fully aware of what’s happening”.

*(General Manager, Social Services).*

“I don’t like surprises – neither does the Governing Council! The part of the iceberg that sinks the ship is always hidden beneath the water... it’s what you don’t see coming that sinks you... I make it my business to know what’s coming, which is why I make sure I’m across these things”.

*(Headmaster, Education).*

### *The significance of strategic planning*

The significance of strategic planning was a particularly strong theme emerging from the interviews. The relevance of strategic planning to the current study lies in the central role it assumes in both the evaluation of performance and the way in which control is subsequently used.

In all but three of the 32 interviews, interviewees indicated that the formulation of strategy in their organization was predominantly deliberate, planned and formally articulated in a strategic plan. In all instances, this strategic planning process was cyclical, meaning that the task of developing the plan was undertaken between every one to three years. The review of progress achieved in the preceding period was integral to this process.

In virtually all interviews, it was apparent that a formalized, rigorous and structured strategic planning process served as the signal to evaluate performance, and, in response, to adjust the use of existing controls and introduce new controls deemed necessary to improve performance outcomes.

Most interviewees reassessed their organizations' performance and reviewed their use of formal MCS on an on-going basis. In the majority of interviews, performance was formally monitored, often on a monthly basis, but in some instances, on a quarterly basis, through some form of performance reporting. These performance reports were a trigger to review and make adjustments to how control was exercised – particularly where planned performance did not meet expected targets. However, these adjustments were minor.

Ongoing review of performance reports resulted in only minor changes to the MCS used, and the way in which they are used. Major changes to the use of control systems tended to occur only at the next round of strategic planning. The time lag between such formal strategic planning sessions was, in all cases, between one and three years. In addition to the formulation of new strategies and initiatives, and the refinement of existing strategies, how these strategies were to be implemented and monitored were a central part of the strategic plan. Control mechanisms were an integral part of these implementation efforts, and were clearly driven by performance in the previous (strategic planning) period.

### *The long-term nature of organizational performance*

As described above, the extent to which predetermined goals were achieved was the primary basis upon which interviewees assessed the performance of their organization. A pattern that became apparent, however, was the long-term nature of these goals and the perceived longer-term orientation of NFPs compared with commercial organizations.

A common perception amongst interviewees was that the shorter-term focus of the commercial sector (with its emphasis on “profit”), made performance evaluation considerably easier than in NFPs where goals were considered more diverse, extending far into the future, and often, fundamentally non-achievable.

The perceived (very) long-term nature of goals was one of the key reasons interviewees cited for the value placed on a formalized and structured planning

process, and a periodic review of performance and evaluation of control mechanisms. With such an approach, however, the time taken to recognize the performance of NFPs may be longer than in commercial organizations, and therefore, observable effects of performance on the MCS will also be longer. This is supported in part by interviewees' view of performance, which often did not seem to differentiate between previous and current organizational performance. Most discussions focused around interviewees' perceptions of the current performance of their organizations. When prompted to distinguish between past performance and current performance, they stressed either the 'cumulative' nature of performance or, that the long-term nature of performance was such that evaluations could not and should not be made on an annual basis. The perception of a long gestation period associated with organizational performance is likely to extend the length of time from cause (performance) to effect (control). This extended cause-effect chain makes it difficult to observe a cyclical effect using cross-sectional research methods.

#### *The prevalence of informal control*

Almost all interviewees indicated that control was not achieved predominantly through what we have conceptualized as diagnostic or interactive systems. Rather, control was principally exercised through informal means.

It was apparent that 'informal control' encompassed a diverse range of behaviours and practices relating not only to responses to organizational performance, but to a wide range of issues including strategic, operational, staff and program related matters. These behaviours and practices were primarily ad-hoc, non-structured and opportunistic encounters with staff, Board members and volunteers.

Commonly, formal MCS were used to articulate the 'official line' on what was required to monitor and report on (typically to comply with funder, Board, statutory, and stakeholder expectations). It was informal control mechanisms that were perceived to be most influential – particularly in relation to performance outcomes – as a means of ensuring activities and operations were 'on track' in relation to the goals and targets specified in their strategic plans. Emerging from this finding was the realization that although these *formal* controls appeared to exert limited practical influence on these NFPs, they largely served to complement the much stronger informal means of control exercised within these organizations in relation to performance.

#### *The importance of transparency and accountability*

The importance of and necessity for, transparency and accountability was a particularly strong theme emerging from the interviews.

The potential ramifications of failing to identify actual or potential problems appeared to be quite strong in the mindset of interviewees. They appeared to be very conscious of the need to 'protect' the assets, funds, public trust, and reputation of their organization in the eyes of external parties such as donors, the general public, government authorities and the business sector. Moreover, interviewees emphasized

the importance of being *seen* to have in place controls that would minimise the potential for loss, harm or damage to the organization. This commitment to demonstrate accountability was high on their personal and organizational agenda, primarily due to the reliance of their organizations on donations, their perception of the high level of competition for funds, and their fear of damage to the image of the organization sustained in the event of claims of fraud, impropriety, or excess. This appeared to translate into a very high need for visible and formal systems that could demonstrate control. Indeed, it appears as though ‘control’ may constitute an integral aspect of performance in these NFPs.

## **DISCUSSION**

Having described our quantitative and qualitative results, in this section we explore their implications. Our aim is to develop theoretical explanations that might provide insights into how performance acts as an antecedent to control within a NFP environment. We pay particular attention to organization context and the role these constructs play in this particular setting.

It was expected that poor performance in a particular period would act as an impetus to the more intensive use of both diagnostic and interactive controls in the subsequent period. While, the questionnaire survey did not support these hypotheses in the sample of NFPs investigated, the qualitative findings suggest four possible explanations for these results.

First, both hypotheses have been predicated on the assumption of a recurrent, cyclical relationship between organizational performance and the use of control systems. From the interviews, it appears likely that the length of the cycle, that is the time between the evaluation of organizational performance and any response in the diagnostic and interactive use of control systems, is longer than we anticipated. This long cycle reflects the strategic planning practices common within these NFPs. Although performance is monitored on an on-going basis, it does not result in changes to controls or the way they are used until the commencement of a *new* strategic planning cycle. The relationships hypothesized in H1 and H2 may exist, but the evidence of effect (the use of MCS) has been collected before its cause (organizational performance) has had time to occur or to act fully. As Luft and Shields (2003, p.195) noted, “the time frame of the study (length and frequency of evidence collection) and the causal interval (the time required for the cause examined in the study to have an effect), should be aligned”. The interviewees commonly regarded the strategic plan as the organizational ‘blueprint’, but it was revised only periodically. It is plausible, therefore, that mechanisms enabling a change in the use of controls (diagnostically or interactively) may not be sufficiently flexible to respond to changing circumstances *within the cycle*. Rather, it may be that changes to control systems in response to perceived poor organizational performance may occur - but only at the beginning of the next strategic planning cycle.

The existence of a formal and structured strategic planning process in which outcomes are reviewed at the conclusion of the ‘strategic planning cycle’ may be an example of what Kaplan (1986) termed ‘accounting lag’ – in this instance, the time taken between the evaluation of organizational performance and subsequent changes to control systems in response. A similar lag effect was observed by Bhimani and Langfield-Smith (2007), who found that the time taken for decision makers to respond to

performance that diverges from expectations was tied to the length of the strategic planning cycle.

A second and related possible explanation for the rejection of the hypotheses, which emerges from the interviews, is the long-term nature of organizational performance in NFPs, compared with for-profit organizations. Our hypothesized relationships between performance and control have been generated from research findings in a commercial context. Yet we have conceptualized organizational performance as the extent to which goals are achieved and necessary resources are acquired. Although this conceptualization is both theoretically and empirically justifiable in the NFP literature (Herman and Renz, 2008; Nobbie and Brudney, 2003), it differs from commercial sector conceptualizations of organizational performance, which tend to focus on profit (Speckbacher, 2003). The absence of profit as a dominant objective in NFPs and the existence of multiple and divergent goals that are often intangible and difficult to measure have been noted frequently (Merchant and Van der Stede, 2003; Kaplan, 2001; Newman and Wallender, 1978) in comparing NFPs and their commercial counterparts. The achievement of diverse goals and the acquisition of resources by NFPs are likely to imply a longer time horizon than the generation of profit, which can be observed in a relatively short period (Frumkin and Andre-Clarke, 2000). Thus, it may be that the difference between our hypothesized relationships and empirical findings may reflect a less intense and immediate recourse to control by NFPs because of the longer time horizons over which organizational performance is assessed. Also, the time horizon of our study (i.e. performance over the past 3 years), even though it employed retrospective approaches, may have been insufficient to enable respondents to the questionnaire and interviewees to assess the level of performance of their organization, given the (very) long-term nature of performance as perceived within the NFP sector.

A third explanation of our quantitative results may lie in how NFPs exercise control. The quantitative part of our study sought to investigate the use of *formal* MCS, and indicated that prior performance was not a statistically significant antecedent to the use of MCS. The interview data, on the other hand, emphasized the importance afforded to *informal* controls. This finding suggests that although prior performance does not appear to significantly influence formal MCS, it may influence other types of control, notably informal controls. Formal controls constitute only part of broader control systems (Otley, 1980, 1994, 1999). In contrast to formal controls, informal controls do not exercise control through explicit, verifiable measures and are not consciously designed. Rather, such controls reflect unwritten policies of the organization (Langfield-Smith, 1997) that serve to communicate rules, policies, procedures and targets informally to all employees. Means by which this communication occurs include shared values, beliefs, and traditions that guide behaviour of employees (Falkenberg and Herremans, 1995); management style, informal dialogue and social forces (Marginson, 2002); and group norms and socialisation (Collier, 2005). Thus, informal controls “often derive from, or are an artefact of the organizational culture” (Langfield-Smith, 1997, p. 208), and, consistent with the findings of the current study, have been found to be, “associated with multiple aspects of organizational practices” (Mouritsen, Hansen and Hansen, 2001, p.201).

Some empirical support exists for the claim that informal rather than formal controls predominate within a NFP context. For example, Abraham (2004, p.1) argues that in a sector that, “values informal relationships, voluntary participation and ‘niceness’, the idea of accountability is somewhat alien”, and that the NFP orientation of mission rather than profit may result in more informal means rather than formal accounting information to facilitate management control. Baraldi (1998, p. 163) found that in NFPs, informal controls are as important as, and complementary to, formal controls, a view consistent with Parker (2001, 2002), who found that informal and formal controls are interdependent, but that informal rather than formal MCS predominated within an Australian religious organization.

The findings of the current study are consistent with the management control literature, which has increasingly acknowledged that formal MCS are only part of a broader set of organizational controls (Abernethy and Chua, 1996; Collier, 2005; Merchant and Van der Stede, 2003; Merchant and Otley, 2007), that multiple means of control do not only complement each other but may also operate as substitutes (Abernethy and Chua, 1996; Ferreira and Otley, 2009), and that equal control of activities can be achieved either by an informal control practice (Huikku, 2007) or by different formal control systems (Gerdin, 2005). Various types of control may play multiple roles and subtle linkages seem to make them operate as a ‘package’ (Abernethy and Chua, 1996).

The apparent reliance on informal controls found in the current study, may explain the apparent lack of response of diagnostic and interactive use of controls to prior organizational performance in NFPs. Although organizational performance may not be an antecedent to the diagnostic and interactive use of controls, this does not obviate its potential influence on informal means of control. Although there is little prior theory or empirical knowledge that relates formal control systems and informal controls (Sandelin, 2008), our interview findings may provide empirical evidence of the possible existence of the equifinality of control within a NFP context.

Finally, based on our interview findings, we contend that organizational performance and control in NFPs may not be independent concepts, that is, organizational performance is not an antecedent of management control, nor is management control an antecedent of organizational performance. Rather, control is seen to be an integral rather than a distinct component of NFP performance. That is, how control is used may very well be central to how performance is defined within a NFP context. The use of control in and of itself is a criterion of performance, leading to a contention that within this sector, control is more an end in itself, rather than a means to the end of improved performance. If this argument is valid, it makes an examination of ‘control’ and ‘performance’ as separate constructs superfluous, and may provide an explanation of the quantitative results of this study. This line of reasoning follows from the argument that a NFP’s control structure is inherently linked to its ability to achieve its goals and accomplish its mission (Gallagher and Radcliffe, 2002). Poor control is likely to result in a range of unfortunate consequences for the organization including damage to its reputation, reduced support from the public, and a negative influence on the morale and motivation of employees and volunteers (Gallagher and Radcliffe, 2002). Such consequences are likely to impede the ability of a NFP to fund its programs and ultimately, to realize its mission. In effect, the use of control systems may be an intrinsic aspect of organizational performance in NFPs.

In contrast to commercial organizations, where control may be considered as a means to an end, control in NFPs may very well be an end in itself. This would suggest a very different relationship between control and organizational performance in NFPs compared with commercial organizations.

## CONCLUSIONS

The aim of this paper was to explore how organizational performance in a prior period might act as an independent variable influencing the subsequent use of management control systems. Combining insights from the strategic management, management accounting and NFP literatures, we hypothesized that in NFP organizations that managers perceive to be low performing, organizational performance would act as an antecedent to the increased use of diagnostic and interactive control systems in a subsequent period, in an attempt to redress performance which has failed to meet expectations. Our questionnaire-based results, however, were contrary to our expectations.

Our interview findings provide possible explanations for these questionnaire results. Although we have argued that the bidirectional relationship between organizational performance and the use of control systems is cyclical (Chenhall, 2003), the cycle length – or speed with which MCS change in response to perceived low organizational performance - may be slower than we expected. This lengthy cycle time is largely attributable to the prevalence of a formal strategic planning process within the NFPs investigated. The perception of interviewees of the longer time horizon associated with performance outcomes in NFPs may accentuate the effects of this longer cycle time. It seems organizational performance in NFPs may involve much longer incubation times than in their commercial counterparts, resulting in longer cycles between performance outcomes and responses to those outcomes in terms of MCS use.

Our quantitative findings also suggest that the diagnostic and interactive uses of control may be overshadowed by the use of informal controls in NFPs. That is, the concept of equifinality of control may very well account for our contrary quantitative results. The importance assigned by interviewees to issues relating to accountability and transparency is another possible explanation of our quantitative results. This emphasis may imply that control represents an intrinsic element of organizational performance in NFPs. If control is seen to be an inherent aspect of performance in NFPs, then the constructs, “control” and “organizational performance”, at least in a NFP context, cannot be regarded as readily distinguishable, and attempts to isolate the effects of one upon the other are likely to be difficult.

Notwithstanding the contextual insights provided by the interviews, in keeping with the exploratory nature of this study, the explanations we have advanced remain largely speculative. The prime contributions of our study are two-fold. First, it emphasises the importance of time and timing associated with the organizational performance and management control constructs. On the evidence presented here, it appears as though the gestation period associated with the concept of organizational performance, the widespread use of a formalized strategic planning process, and the extent to which control and performance are intertwined. Moreover, the time over which these concepts are measured, acknowledged, and acted upon are likely to be considerably greater than in commercial enterprises, reflecting the social objectives of

NFPs. The current study therefore raises awareness of the factors that might be considered in investigating the behaviour of such time-dependent constructs, and the differences between the nature of these constructs in a NFP compared with a commercial context. Second, the contradiction between the quantitative and qualitative results underlines the difference between MCS and control. The quantitative part of our study being primarily formal systems, whereas the qualitative part reflects the important influence of informal control, which in a NFP environment, appears to predominate. This finding is not surprising as it is consistent with the concept of equifinality of control where control is achievable by informal control practices (Sandelin, 2008), differentiated formal control systems (Gerdin, 2005), or the simultaneous operation of multiple formal and informal control configurations (Malmi and Brown, 2008) acting as a total 'control package'. The findings of our study provide some much needed empirical support for this view by highlighting the simultaneous existence and interplay between formal control systems and informal controls.

#### *Limitations of this study and directions for future research*

In interpreting the results of this study, we acknowledge several limitations. First, in considering our measure of organizational performance, the questionnaire was designed to capture performance over time (the past three years), which relied on respondents' recall and memory of events from the previous period. While this enabled respondents to "look back" and evaluate the prior performance of their organization, they were doing so with the benefit of hindsight and this could have distorted their responses. In fact, the perspectives from which interviewees discussed organizational performance appeared to be contemporaneous rather than historical, and this seemed to reflect interviewees' perceptions of the long-term nature of organizational performance. Prior performance is central to our investigation, and the absence of a valid measure of organizational performance in a prior period may have compromised our quantitative results.

Related to this was our use of a self-reported approach to measuring prior organizational performance. Although self-assessment processes have dominated measures of organizational outcomes, particularly in contingency-based research, the validity of unverified self-reports of organizational performance is often raised as a concern (Chenhall, 2003). These concerns include the objectivity of such self-ratings (Abernethy and Brownell, 1999), and the potential for some respondents to inflate reports of performance of their organization in such circumstances where others may not (Abernethy and Stoelwinder, 1995).

Subjective measures of performance have been criticized for their weak correlations with objective measures. However, "both types of measures are not necessarily conceptually congruent" (Van der Stede, Young, and Chen, 2005, p. 675). CEOs' and senior executives' views about their organizations could easily be different from actual outcomes, or at least from the perspectives of other people within or outside the organization and this does not necessarily invalidate the subjective measures nor eliminate the possibility of inaccuracy of objective measures. In contrast to objective assessments of performance, subjective assessments are consistent in terms of the performance dimensions assessed because they are based on those aspects of performance that are most salient to the respondent, they are most likely to shape their

behaviours and guide their actions (Van der Stede, et al., 2005), particularly in relation to the use of controls in response to perceived performance outcomes. More importantly, the subjective, self-assessments of performance we have collected may provide a better type of information than more “objective” measures of performance on the basis that subjective beliefs are reality, at least in the eyes of the respondent (Link and Oldendick, 2000). Indeed, as the predominant decision-makers about the use of controls, the assessment of performance *as perceived by CEOs and senior executives* is itself, the relevant predictor variable, with such “objective” measures of performance being largely incidental.

Nevertheless, similar to the experience of Bhimani and Langfield-Smith, (2007), the nature of our study may have attracted interviewees with a particular enthusiasm for and pride in their approaches to planning and control because of a ‘perception that normative rationality is important to signal externally’ (ibid, p. 25). We therefore recognize caution is required in generalizing the results of this study across all NFPs.

A second limitation concerns the time frame that is sufficient to incorporate any lags between changes in organizational performance and the use of control systems. While our study examined organizational performance in a prior period, clearer insights into the use of management control and how it is influenced by organizational performance in prior periods could be gained by more detailed time-focused surveys, or longitudinal studies of particular organizations.

Third, the current study has not considered the levers of control framework in its entirety, but rather, has followed similar studies which have focused exclusively on the diagnostic and interactive uses of control (for example, Abernethy and Brownell, 1999; Bisbe and Otley, 2004; Henri, 2006; Kober, Ng, and Paul, 2007). Although not explicitly tested in the current study, it may be that all four levers of control, their individual, interactive and bidirectional effects combine to play a significant role in how control is exercised within NFP organisations.

Moreover, according to the concept of equifinality, control is achieved through a combination of formal MCS and informal controls, and our interview findings have pointed to the influential role of this latter form of control. The findings of our study provide some insight into how different elements of formal and informal controls complement or could be used as substitutes for one another in response to prior organizational performance in NFPs. Further investigation of the influence of prior organizational performance on the interplay between the levers of control, and between formal MCS and informal controls would be a particularly interesting area for future researchers.

Finally, the primary focus of our exploratory study has been to investigate the extent to which organizational performance may act as an independent variable within a NFP context. We do not purport to generalize our findings, given the well-documented differences between the NFP and commercial sectors, and the exploratory nature of this study. Although unresolved questions remain, the explanations we have proposed provide insights and a rich basis for further investigating the positioning of organizational performance on the “right hand side”.

*~ End of Paper ~*

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## **Appendix A**

### **Survey questions used in this study<sup>5</sup>**

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<sup>5</sup> Section 2 of the questionnaire is omitted as it was relevant to the larger study rather than the current study.

### ***Section 1: Demographics***

**1. What is your position title?**

**2. How long have you held your current position?**

- Less than 1 year
- 1 year to less than 3 years
- 3 years to less than 5 years
- 5 years or more

**3. What type of industry best describes your area of operation?**

- Education and Research
- Health
- Culture and Recreation Services
- Social Services
- Business and Professional Associations or Trade Union

**4. How many paid employees (expressed as “full time equivalents”), are normally employed within your organization on average?**

*(A full time equivalent equates to paid employment of 35 hours a week.)*

**5. Select the best description of your organization from the following three categories**

- The Organization comprises mostly paid staff
- The Organization comprises partly paid staff and partly volunteers
- The Organization comprises mostly volunteers

### ***Section 3: Management Control Systems***

*This section of the questionnaire asks you to provide information about the Management Control Systems (MCS) used by your Organization. MCS may be thought of as, “formal or informal procedures and systems that use information to maintain or alter patterns in organizational activity”.*

12. Please indicate, by ticking the appropriate box, how management control systems are used in your organization.

- a. Monitoring results
- b. Reviewing key measures
- c. Tracking progress towards goals
- d. Comparing outcomes to expectations
- e. Providing a common view of the organization
- f. Tying the organization together
- g. Enabling the organization to focus on common issues
- h. Discussing strategic uncertainties facing the organization, in meetings of supervisors, sub-ordinates and peers
- i. Continually challenging and debating underlying data, assumptions and action plans

- j. Enabling the organization to focus on critical success factors
- k. Developing a common vocabulary in the organization

#### ***Section 4: Performance***

*This section of the questionnaire asks you to provide information about performance in your Organization. Performance may be thought of as the extent to which the organization achieves its corporate objectives as reflected in indicators or measures.*

##### ***A. Goal Attainment***

14. Please indicate, by ticking the appropriate box, the extent to which you agree or disagree with the following statements.
- a. I feel the goals of the organization truly reflect the interests and needs of its constituencies or stakeholders
  - b. I feel the organization can clearly measure the benefits it provides to constituencies or stakeholders
  - c. I feel the performance of this organization over the past three years has been excellent in meeting its goals

##### ***B. Financial***

15. In the past three years, to what extent has your organization been able to acquire the resources it needs?
- No extent*
  - Some extent*
  - Moderate extent*
  - Great extent*
  - Very great extent*

## **Appendix B**

### **Demographic characteristics of the sample**

<i>Variable</i>	<i>Sample</i>		
Position of respondent	Most senior management position in the organization	88%	
	Other position within the organization	12%	
Tenure of respondents	Less than one year	14.5%	
	One year to less than three years	24.7%	
	Three years to less than five years	11.3%	
	Five years or more	49.5%	
Industries of respondent organizations		<u>Sample</u>	<u>ABS *</u>
	Education and Research	22.6%	24%
	Health	27.4%	15%
	Culture and Recreation	18.3%	21%
	Social Services	24.2%	26%
	Business and Professional		
	Associations or Trade Unions	7.5%	2.5%
Other	0%	11.5%	
Number of Full Time Equivalent (FTE) staff		<u>Number</u>	<u>%</u>
	Up to 10	56	30.9
	11 to 35	36	19.9
	36 to 100	44	24.3
	101 to 700	36	19.9
	701 to 3,800	<u>10</u>	<u>5.0</u>
	Total	182	100.0
	Mean = 170; Median = 35.0; SD = 456.7.		
Staff/Volunteer Composition	Mostly Paid Staff	58.6%	
	Partly Paid Staff/Partly Volunteers		24.2%
	Mostly Volunteers		17.2%

\* Source: Australian Bureau of Statistics, Not-for-Profit Organizations, Australia, Australian National Accounts 2006-07, Cat. 8106.0, 2008.

## **Appendix C**

### **Summary of variables and their codes**

### *Diagnostic Control Systems*

<i>QUESTION</i>	<i>VARIABLE CODE</i>	<i>DESCRIPTION</i>
12a	<i>DCSMonit</i>	Monitoring results
12b	<i>DCSRev</i>	Reviewing key measures
12c	<i>DCSTrck</i>	Tracking progress towards goals
12d	<i>DCSComp</i>	Comparing outcomes to expectations

### *Interactive Control Systems*

<i>QUESTION</i>	<i>VARIABLE CODE</i>	<i>DESCRIPTION</i>
12e	<i>ICSView</i>	Providing a common view of the organization
12f	<i>ICSTie</i>	Tying the organization together
12g	<i>ICSFocus</i>	Enabling the organization to focus on common issues
12h	<i>ICSDisc</i>	Discussing strategic uncertainties facing the organization, in meetings of supervisors, subordinates and peers
12i	<i>ICSDeb</i>	Continually challenging and debating underlying data, assumptions and action plans
12j	<i>ICSCSF</i>	Enabling the organization to focus on critical success factors
12k	<i>ICSVoc</i>	Developing a common vocabulary in the organization

***Performance***

<b><i>QUESTION</i></b>	<b><i>VARIABLE CODE</i></b>	<b><i>DESCRIPTION</i></b>
<b><i>A. Goal Attainment</i></b>		
14a	PerfRefl	The extent to which the goals of the organization truly reflect the interests and needs of its constituencies or stakeholders
14b	PerfMeas	The extent to which the organization can clearly measure the benefits it provides to constituencies or stakeholders
14c	PerfRat	The extent to which the performance of this organization over the past three years has been excellent in meeting its goals
<b><i>B. Financial</i></b>		
15	PerfRsAq	The extent to which the organization has been able to acquire the resources it needs over the past three years.

## **Appendix D**

### **Descriptive statistics for questionnaire items**

***Descriptive statistics ~ Questionnaire Items (N=182)***

<b>Variable</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b><i>CS</i></b>				
DCSTrck	1	7	4.51	1.648
DCSMonit	1	7	4.96	1.484
DCSComp	1	7	4.72	1.532
DCSRev	1	7	4.69	1.596
<b><i>ICS</i></b>				
ICSDisc	1	7	4.82	1.664
ICSDeb	1	7	4.19	1.845
ICSView	1	7	4.75	1.595
ICSTie	1	7	4.79	1.649
ICSFocus	1	7	4.88	1.400
ICSCSF	1	7	4.88	1.600
ICSVoc	1	7	4.72	1.647
<b><i>Performance</i></b>				
PerfRat	1	7	5.12	1.458

PerfRsAq	1	7	3.39	.907
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