THE LEVERS OF CONTROL IN THE BOARDROOM

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ABSTRACT

Purpose: The paper challenges agency and stewardship theories' straw person conceptions of human behaviour and discusses how the board of directors can use accounting and control systems to effectively moderate a realistic model of the CEO's behaviour.

Design/methodology/approach: The paper uses a pragmatic approach in reconciling agency and stewardship theory.

Findings: As well as a framework for implementing strategy, Robert Simons' levers of control can be used to regulate the behaviour of the CEO. Beliefs and interactive control systems encourage pro-organisational behaviour, whereas boundary and diagnostic control systems constrain self-interested (or opportunistic) behaviour.

Originality/value: Assuming people are opportunistic leads to accounting and control systems which encourage opportunistic behaviour and discourage pro-organisational behaviour. Assuming people are pro-organisational leads to accounting and control systems which an opportunistic CEO can exploit. This paper shows how, theoretically, organisations can employ the levers of control to resolve this paradox.

Keywords: Corporate governance; Management accounting; Levers of Control; Agency Theory; Stewardship Theory

Paper type: Conceptual paper

1. INTRODUCTION

During the bull markets of the 1990s, Chief Executive Officers (CEOs) of major corporations received billions of share options (Frey and Osterloh, 2002; Bebchuk and Fried, 2004). Michael Jensen's prescription of pay-for-performance (Jensen and Meckling, 1976; Jensen and Murphy, 1990) appeared to be justified as share options motivated CEOs to maximise their companies' share prices and, thus, aligning the interests of CEOs with those of the shareholders. However, as stock markets turned from bull to bear with the bursting of the Internet bubble and then the scandals at Enron, WorldCom, Tyco and the like, it became apparent that share options combined with stock market pressures to meet quarterly earnings targets had led CEOs to act irrationally, myopically and, even, unethically (Leung and Cooper, 2003; Madrick, 2003). Michael Jensen now admits that share option schemes motivated CEOs to keep share prices up, even if this meant lying to the stock markets and creating fictitious financial statements (Cassidy, 2002; Jensen and Murphy, 2009). To prevent the reoccurrence of this incentive problem, Alfred Rappaport, Michael Jensen and others have argued for indexed share options (Cassidy, 2002). The 2008 global financial meltdown, however, reminds people that this incentive problem remains.

Agency theory assumes that CEOs are self-interested (Lubatkin, 2005) – and the aforementioned events appear to support this assumption – meaning that incentives such as share options and controls such as independent directors and auditors are needed to curb CEOs' opportunistic decision-making (Solomon, 2007). However, the late Sumantra Ghoshal was not convinced that all individuals including CEOs are self-interested (Ghoshal and Moran, 1996; Ghoshal, 2005; Rocha and Ghoshal, 2006). He believed that assuming CEOs are self-interested would lead to a self-fulfilling prophecy. What if CEOs are social actors interpreting and responding to social pressures (Morgan and Smircich, 1980). Sumantra Ghoshal argued that CEOs are socialised through business schools, consultants and management gurus to believe that people are self-interested (also see Miller, 1999). Further, using share options to control the behaviour of CEOs reinforces this belief as CEO wealth is linked to the company share price. Maximising the share price in the short-term becomes a rationalised myth or social norm for CEOs. Bruno Frey's crowding-out theory adds further weight to this argument (Frey and Jegen, 2001; Frey and Osterloh, 2002, 2005). He argues that while CEOs are motivated by intrinsic and extrinsic rewards, increasing potential extrinsic rewards can crowd-out potential intrinsic rewards (also see Deci and Ryan, 2001). For example, while a car salesperson may enjoy assisting their clients in finding the car which best suits the clients' needs, this intrinsic reward can be crowded out by the pressure of sales targets and commission-only income.

Agency theorists argue that if incentives are not used to motivate CEOs then they would shirk their duties or build empires (Fama and Jensen, 1983a,b). As salary and company size are positively related, CEOs without performance-based incentives will aim to increase revenues and accumulate assets (Murphy, 1999; Tosi et al., 2000). However, Lex Donaldson disputes that all CEOs are self-interested. He proposed stewardship theory which assumes that CEOs are self-actualising and collective-serving (Donaldson, 1990; Donaldson and Davis, 1991; Davis et al., 1997). Under stewardship theory assumptions, CEOs are pro-organisational and act in the best interests of shareholders, meaning that performance-based incentives are not necessary. Stewardship theory is the anti-thesis of agency theory. Based on the empirical evidence, it is not clear whether agency or stewardship theory has greater explanatory power (Muth and Donaldson, 1998; Kang and Zardkoohi, 2005). The problem for stewardship theorists is convincing boards of directors, shareholders and regulators that CEOs (and other managers) can be trusted. Barrack Obama's rhetoric on the evils of CEO bonuses underscores this problem (Shear, 2010; Cho and Appelbaum 2010). Thus the paradox of CEO pay, boards of directors cannot risk trusting CEOs to do their duty without controls and incentives, and they cannot risk offering incentives to CEOs without encouraging the opportunistic, myopic behaviour they are seeking to avoid.

To resolve the paradox of CEO pay requires academics to move beyond either/or thinking (Sundaramurthy and Lewis, 2003; Dalton and Dalton, 2005; Roberts et al., 2005). Neither agency nor stewardship theory's straw person conceptions of CEO behaviour are realistic. Aside from a small percentage of organisational psychopaths (Bobby, 2006), the majority of CEOs are both self-serving and collective-serving. They want to act in the best interests of the company and shareholders. They are motivated by intrinsic (e.g. challenge and enjoyment) and extrinsic (e.g. money and status) rewards. But the behaviour of CEOs is not necessarily homogenous, static and unambiguous; they may act as an agent one day and as a steward another day (Angwin et al., 2004). Drawing on a Robert Simons' Levers of Control (Simons, 1991, 1995a,b, 1999, 2000), this paper reconciles the differences between agency and stewardship theory, and then shows how accounting and control systems can moderate the behaviour of CEOs. It is argued that beliefs and interactive control systems encourage pro-organisational behaviour, whereas boundary and diagnostic control systems constrain self-interested (or opportunistic) behaviour. The accounting and control systems must be designed to account for the complex and dynamic behaviour of CEOs.

The theoretical framework described in this paper is generally untested as while there has been much research interest in Robert Simons' Levers of Control (e.g. Bisbe and Otley, 2004; Widener, 2007), studies have not examined the levers of control in the boardroom. Further, aside from Lee Parker's research (Parker, 2003, 2007, 2008), there has been scant research on how boards of directors use accounting and control systems. In a similar vein to this paper, Seal (2006, p.405) argues that strategic management accounting "strengthens the input of non-executive directors and other actors who may wish to hold senior executives to account." While Seal (2006) offers a re-conceptualisation of agency theory – institutional theory of agency – and argues that the board of directors should use strategic management accounting to manage CEOs, this paper integrates agency and stewardship theories and argues that the Levers of Control can be used to enable and constrain CEOs. The remainder of the paper is organised as follows: First, agency and stewardship theories assumptions about human nature are compared and integrated. Second, the roles of the board of directors – derived from agency and stewardship theories – are compared and integrated. Third, the role of accounting and control systems in the boardroom is considered. Fourth, how the Levers of Control can be used to manage CEO behaviour is discussed. Beliefs, boundary, diagnostic control and interactive control systems are described. Studies into how organisations use the Levers of Control are also reviewed. Fifth, limitations and future research opportunities are explored. Sixth, and finally, conclusions are drawn.

2. THEORETICAL CONCEPTIONS OF HUMAN NATURE

Human nature has been conceptualised in many different ways from humans as social animals to pursuers of enlightenment (see Lundberg and Young, 2005, Chapter 4). Agency theory – rooted in neo-classical economics (Von Neumann and Morgenstern, 1947) – assumes individuals are self-serving and, consequently, goal congruence is achieved through management controls (Jensen and Meckling, 1976; Fama and Jensen, 1983a,b). Self-serving individuals seek to maximise their own utility in terms of extrinsic rewards such as wealth and status (Jensen and Meckling, 1994; Frey and Osterloh, 2002). As an agent (or homo-economicus), the CEO is a narcissist who craves power and influence over others (Khurana, 2002). Conversely, stewardship theory – rooted in psychology (Maslow, 1943) – assumes individuals are self-actualising and, consequently, individuals want to achieve organisational goals and coercion is not required (Donaldson, 1990; Donaldson and Davis, 1991). Self-actualising individuals seek to maximise their own utility in terms of intrinsic rewards such as enjoyment and challenge (Deci and Ryan, 2001; Frey and Osterloh, 2002). As a steward (or homo-actualisus), the CEO is a charismatic leader, who works tirelessly to advance the organisation's interests. Davis et al. (1997) compares agency and stewardship theory's assumptions about human nature across a number of behavioural, psychological and situational dimensions (see table 1).

	Agency Theory	**Stewardship Theory**
Model of Man [sic]	Economic man [sic]	Self-actualising man [sic]
Behaviour	Self-serving	Collective serving
Psychological		
Motivation	Lower order / economic needs (physiological, security, economic)	Higher order needs (growth, achievement, self-actualisation)
	Extrinsic	Intrinsic
Social comparison	Other managers	Principal
Identification	Low value commitment	High value commitment
Power	Institutional (legitimate, coercive, reward)	Personal (expert, referent)
Situational Mechanisms		
Management Philosophy	Control oriented	Involvement oriented
Risk orientation	Control mechanisms	Trust
Time frame	Short term	Long term
Objective	Cost control	Performance enhancement
Cultural differences	Individualism	Collectivism
	High power distance	Low power distance

Table 1: Theoretical Conceptions of Human Nature (Davis et al., 1997, p.37)

Agency and stewardship theory's conceptions of human nature appear to be dichotomous (or opposing positions); either the CEO is an agent or a steward. Davis et al.'s (1997) principal-manager choice model exemplifies this dichotomy. However, CEO behaviour is not homogenous throughout the world as social norms about CEO behaviour vary between countries (Tosi and Greckhamer, 2004; Bruce et al., 2005) and ownership structures such as family-controlled businesses (Miller and LeBreton-Miller, 2006). There is no universal model of human behaviour; human factors such as beliefs, cognitive abilities, needs and personality, and environmental factors such as culture, laws, norms and organisational structure influence in varying ways how humans behave (Furnham, 2005). For example, in an experimental study of incentives, Fong and Tosi (2007, p.161) found "conscientious individuals do not shirk with or without agency controls." Perhaps instead of hiring charismatic CEOs which turn out to be narcissistic (Khurana, 2002), boards of directors should seek CEOs which are conscientious. Thus, agency and stewardship conceptions of human nature are naïve, overly-simplistic and, as Samantra Ghoshal would argue, bad for practice. A pragmatic (or realistic) conception of human nature is that agent-like and steward-like behaviour are extreme positions on a continuum. CEO behaviour is likely to be distributed in some manner along this continuum. CEOs are human beings and as such are not lightning calculators of expected utility (Veblen, 1919), but are part-rational and part-emotional, and susceptible to socialisation (Furnham, 2005). CEOs may act as agents one day and stewards another day. What is certain is that the behaviour of CEOs is not homogenous, static and predictable; it will vary from day to day as human and environmental factors change.

3. THE ROLE OF THE BOARD OF DIRECTORS

The role of the board of directors has been conceptualised in many different ways from rubber stamping (Mace, 1971) to resource providers (Pfeffer and Salancik, 1978). Drawing on their assumptions about human nature, agency and stewardship theory generate opposing conclusions about the role of the board of directors. Agency theorists argue that as the CEO is self-interested, the board of directors must monitor and control the behaviour of CEO and ensure that the CEO's interests are aligned to those of the shareholders (Jensen and Meckling, 1976; Fama and Jensen, 1983a,b). On the other hand, stewardship theorists argue that as the CEO is self-actualising, the board of directors should collaborate with the CEO and use their collective knowledge and skill to add value to the organisation (Donaldson, 1990; Donaldson and Davis, 1991). Agency theorists believe that trust and commitment between the board of directors and the CEO is not sufficient to solve organisation problems without incentives; whereas stewardship theorists believe the opposite (Merchant et al., 2003). These opposing roles of the board have been conceptualised in different, yet comparable ways (see table 2). Agency theorists prescribe a conformance role for the board of directors; they must ensure that the CEO's behaviour conforms to shareholders' expectations. Stewardship theorists prescribe a performance role for the board of directors; they must work with the CEO in order to meet the shareholders' expectations. Thus, the role of the board of directors can be either to minimise agency costs or to maximise organisational performance (Davis et al., 1997).

	Agency Theory	**Stewardship Theory**
Donaldson (1990)	Control	Coordination
Davis et al. (1997)	Control	Involvement
Hung (1998)	Conformance Control	Performance Strategic
Muth and Donaldson (1998)	Managerial Control	Managerial Empowerment
Westphal (1999)	Independent	Collaborative
Merchant et al. (2003)	Monitor Control	Reinforce Empower
Sundaramurthy and Lewis (2003)	Discipline Monitor	Service Advise
Overall	*Minimise agency costs*	*Maximise organisational performance*

Table 2: Theoretical Conceptions of Role of the Board of the Directors

The two opposing roles of the board of directors have significant implications for corporate governance. The word 'governance' has its origins in captaining a ship; steering and keeping in good order (Farrar, 2001). Corporate governance is thus concerned with how the board of directors oversees the organisation and manages the CEO (Farrar, 2001; du Plessis et al., 2005). Three major components of corporate governance are CEO remuneration, board structure and board process. Agency and stewardship theory's have opposing prescriptions for these components of corporate governance (see table 3). Determining how and how much to remunerate the CEO is a critical issue for the board of directors, particularly under agency theory's assumptions of a self-interested, extrinsically motivated CEO. Under stewardship theory, the board of directors needs to consider both financial and intangible rewards. Ensuring the CEO is both challenged by and enjoys their work is not an easy task, as psychologists can attest (Furnham, 2005). Also, determining the structure of the board has been a much debated issue, particularly since the Enron and Andersen scandals (du Plessis et al., 2005; Seal, 2006; Solomon, 2007). Agency theorists argue for the separation of the CEO and Chair, a board comprising mainly independent directors and a large number of directors including representatives of institutional investors (Solomon, 2007). Stewardship theorists argue for the opposite (Davis et al., 1997). The empirical evidence is, however, mixed and contingent (Kang and Zardkoohi, 2005). Finally, the board of directors needs to determine how to relate to the CEO in terms of relationships, involvement, culture, and function (Westphal, 1999; Leblanc and Gilles, 2005; Roberts et al., 2005). Agency theorists argue that the board of directors should be impassionate observers of the CEO, whereas stewardship theorists argue that they should be passionate friends of the CEO (Davis et al., 1997). While board process has received scant attention in the literature (Pye and Pettigrew, 2005), the empirical evidence suggests that the board of directors needs to be both a monitor of and an advisor to the CEO (Westphal, 1999; Leblanc and Gilles, 2005).

	Agency Theory	**Stewardship Theory**
CEO Remuneration		
- Philosophy	Variable	Fixed
- Focus of Rewards	Extrinsic	Intrinsic
- Purpose of incentives	Alignment and motivation	Goal-setting
- Measures	Financial	Non-financial
- Size of (potential) bonus	Large	Small
Board Structure		
- Role of the CEO	Separate CEO and Chair	Combined CEO and Chair
- Type of directors	Independent directors	Affiliated/Executive
- Role of independent directors	Representatives	Expert advisors
- Size of the board	Large	Small
Board Process		
- Relationships	Arm's length	Close social ties
- Involvement	Low	High
- Culture	Adversarial	Collaborative
- Function	Monitoring	Advise

Table 3: Theoretical Conceptions of Corporate Governance

While agency and stewardship theory appear to have dichotomous conceptions of the role of the board of directors and how the board should govern an organisation, these conceptions are not incompatible. Boards of directors are generally not comprised of entirely independent (non-executive) directors or executive directors, particularly in large corporations. Solomon (2007, p.95) concludes that "the majority of empirical evidence endorses the roles of both non-executive and executive directors… Both groups of directors bring different but essential skills to the boardroom." The board of directors can monitor and advise the CEO (and his/her executive team). Directors within a board can have different but equally important roles (Leblanc and Gilles, 2005). Also, directors can switch roles from being an evaluator of the CEO's performance to a collaborator on the CEO's strategic plan. The reality of the relationship between the board of directors and the CEO is that while it is complex and dynamic, both control and collaboration are necessary to meet shareholder's expectations (Tricker, 2009). For example, in a US study of social ties between directors and the CEO, and boardroom collaboration in strategic decision-making, Westphal (1999, p.19) found "CEO-board collaboration and control are independently and positively related to subsequent firm performance.” While agency and stewardship theorists advocate opposing roles and corporate governance practices, the empirical evidence suggests that the effective boards operate between these two extreme positions, combining elements of both (Roberts et al., 2005; Solomon, 2007; Tricker, 2009).

4. ACCOUNTING AND CONTROL SYSTEMS IN THE BOARDROOM

Accounting and control systems provide managers and, presumably, directors with information for planning, controlling and decision-making (Anthony and Govindarajan, 2007). However, the literature is almost silent on what management accounting information boards of directors want and use, and how boards of directors design or use accounting and control systems. Searching Google Scholar, corporate governance journals and management accounting journals yields few studies on accounting and control systems in the boardroom. For example, a search of *Corporate Governance: An International Review* using the keyword ‘budget’ yields no hits. For example, a search of *Management Accounting Research* using the keywords ‘corporate governance’ and ‘board of directors’ yielded 60 and 50 hits, respectively, but few of these papers discuss how the board of directors uses accounting and control systems. Similarly, there is not more than a few pages dedicated to the use of accounting and control systems by the board of directors in management accounting (e.g. Anthony and Govindarajan, 2007; Merchant and van der Stede, 2007; Bhimani et al., 2008; Dury, 2008) and corporate governance (e.g. Farrar, 2001; Monks and Minow, 2004; du Plessis et al., 2005; Solomon, 2007; Tricker, 2009) texts. Notable exceptions include Lee Parker’s research on financial accountability in the boardrooms of not-for-profit organisations (Parker, 2003, 2007, 2008), and CIMA’s (Chartered Institute of Management Accountants) discussion and best practice papers on enterprise governance (CIMA, 2003, 2004, 2005, 2007a,b, 2009a,b, 2010).

Merchant and van der Stede (2007, p.577) believe that “Corporate governance systems and management control systems (MCSs) are inextricably linked… Changes in corporate governance mechanisms and practices will usually have immediate and direct effects on the effectiveness of MCSs”, although they provide few examples of these relationships. Given the dearth of empirical evidence on the use of accounting and control systems in the boardroom, the following discussion is somewhat speculative. CIMA (2004, 2009a) prescribes that enterprise governance includes planning, budgeting, performance management, cost management, investment appraisal, etc. However, how the adoption and use of these accounting and control systems varies under agency and stewardship theory’s assumptions has not been discussed in the literature. Davis et al. (1997) provide some clues as they argue that in a principal-agent relationship, the board will focus on short-term cost control; whereas in a principal-steward relationship, the board will focus on long-term performance enhancement. Therefore, control (discipline, monitoring or surveillance) characters accounting and control systems under agency theory; whereas collaboration characterises them under stewardship theory. Traditional accounting and control systems such as centralisation, incremental budgeting, standard costing and ROI are characterised by control. Contemporary accounting and control systems such as decentralisation, zero-based budgeting (or beyond budgeting), total quality management and balanced scorecard are characterised by collaboration. The notions of control/traditional versus collaboration/contemporary are used to determine how accounting and control systems vary under agency and stewardship theory (see table 4).

	Agency Theory	**Stewardship Theory**
Planning - Focus - Horizon - Level of board involvement	 Cost reductions Short-term (1-3 years) Review and approve the CEO's plan	 Competitors and customers Long-term (3-5 years) Collaborate with CEO in formulating the plan
Budgeting - Type - Use - Level of board involvement - Reaction to variances - Revisions allowed	 Incremental Performance evaluation Review and approve the CEO's budget CEO faces punitive measures No	 Strategic Planning Collaborate with CEO in formulating the budget Collaborative investigation Yes
Performance Management (or Management Control) - Culture - Measures - Systems - Evaluation	 Management by exception Financial targets ROI or EVA Objective	 Management by objective Non-financial targets Balanced scorecard Subjective
Cost Management - Focus - Systems	 Cost and process Standard or Activity-based costing	 Competitor and customer Strategic-focused systems (e.g. TQM, JIT, TOC)
Decision-Making - Culture - Investment decisions - Model of analysis	 Centralisation Discounted cash flow Organisation value chain analysis	 Decentralisation Payback period Industry value chain analysis

Table 4: Accounting and Control Systems in the Boardroom

It is quite unrealistic to believe that any organisation, even if their CEO is an agent or steward, would alter all of their accounting and control systems to better suit the behavioural (or psychological) profile of the CEO. However, given that there is almost no empirical evidence on how CEO behaviour influences the board of directors' choice or use of accounting and control systems, it is impossible to construct a realistic view. As the average CEO is likely part-agent and part-steward, it is conceivable that the board of directors will employ some traditional and contemporary accounting and control systems in order to control and collaborate with the CEO. But which accounting and control systems are more important and under what circumstances is, at this point, unknown. Large publically-listed companies do, however, include much information in their annual reports on how the board of directors (and its sub-committees) formulates, implements and monitors strategy as well as how the CEO is remunerated (e.g. performance measures) and why they are remunerated in this manner (e.g. remuneration principles) (CIMA, 2009b). Thus, it is probable that boards of directors do use accounting and control systems, but there is scant empirical evidence. There have been many calls for research into the boardroom (Davis et al., 1997; Sundaramurthy and Lewis, 2003). Academics have begun to respond with in-depth analyses of board practices and processes (e.g. Leblanc and Gilles, 2005; Roberts et al., 2005; Parker, 2008) as well as models of strategy (Pugliese et al., 2009) and behaviour (van Ees et al., 2009) in the boardroom.

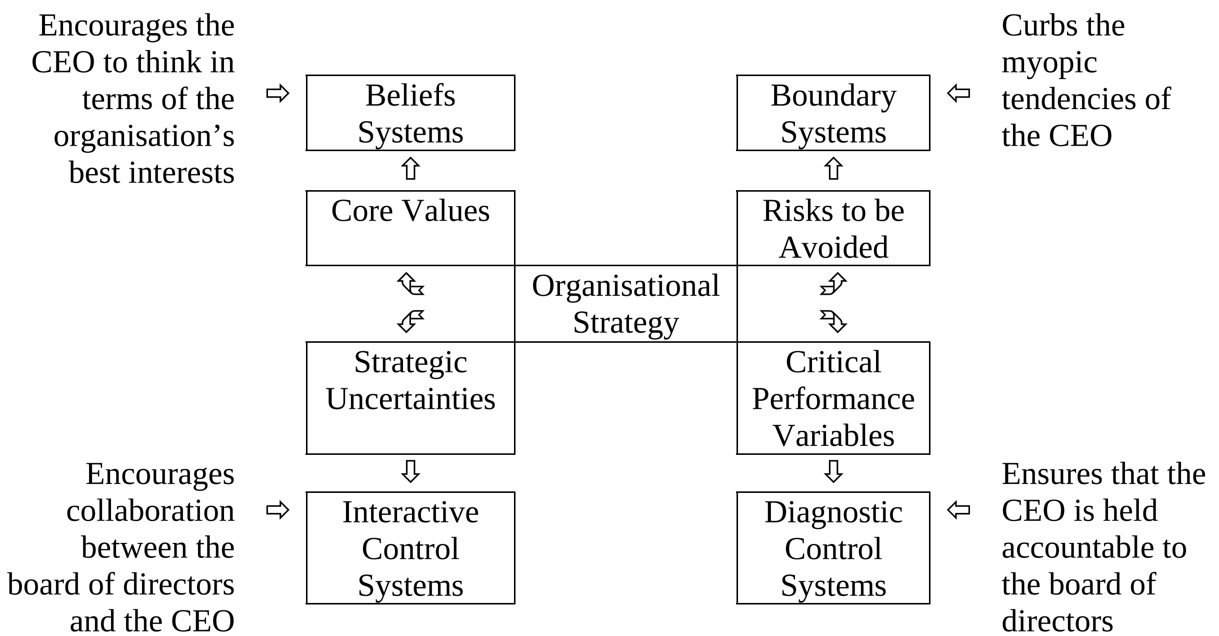
The board of directors and the CEO set ‘the tone at the top’ which will influence the choice and use of accounting and control systems (Anthony and Govindarajan, 2007). When an organisation’s decision-making is centralised, the accounting and control systems which are chosen and emphasised at the top of the organisation are likely to be cascaded down management hierarchy of the organisation. When an organisation’s decision-making is decentralised, the accounting and control systems are not necessarily choice at the top of the organisation, but the board of directors and the CEO are likely to still deploy accounting and control systems to gather intelligence, assess performance and allocate resources. Irrespective of whether decision-making is centralised (top-down) or decentralised (bottom-up), the board of directors will need draw on information from the organisation’s accounting and control systems to govern the organisation and CEO. CIMA (2004) found that the success or failure of an organisation’s board of directors is dependent on the tone at the top and the development of accounting and control systems (e.g. a strategic scorecard). Having well-designed accounting and control systems are critical in successfully formulating and implementing an organisation’s strategy (CIMA, 2004, 2005, 2010). Drawing on Robert Simons’ Levers of Control, this paper provides a pragmatic model of how the board of directors can use accounting and control systems to moderate the CEO’s behaviour.

5. THE LEVERS OF CONTROL IN THE BOARDROOM

As originally conceived, Robert Simons’ Levers of Control describe how managers can implement and control business strategy (Simons, 1995b). There are three major organisational tensions which Simons (1995b, p.153) argues the Levers of Control manage: “(1) unlimited opportunity versus limited attention, (2) intended strategy versus emergent strategy, and (3) self-interest versus the desire to contribute.” To implement and control business strategy, managers need to identify the organisation’s core values, risks to be avoided, strategic uncertainties and critical performance variables. Beliefs, boundary, interactive control and diagnostic control systems are used to manage these aspects of business strategy, respectively (Simons 1995b, 2000). Drawing on the metaphor of yin and yang (or positive and negative), Simons (1995b) argues that beliefs systems inspire managers while boundary systems limits their imagination, and interactive control systems focuses managers attention on new opportunities while diagnostic control systems ensure managers control day-to-day operations. Ferreira and Otley (2009) believe that the Levers of Control framework is both broadly empirically valid and practically useful for managers. However, it is pitched at the senior management (or divisional) level of the organisation and is concerned with business strategy. Simons (1995b; 2000) provides little guidance on how the Levers of Control framework can be applied to the governance level. This section presents a modified version of the Levers of Control and then discusses how the levers can be used to moderate the behaviour of the CEO.

At the governance level of the organisation, the board of directors is concerned with hiring, managing and replacing the CEO as well as managing relationships with shareholders and other stakeholders (du Plessis et al., 2005; Solomon, 2007; Tricker, 2009). The board of directors needs to collaborate with the CEO to formulate the organisational strategy (or, at least, review and approve the CEO’s organisational strategy), as well as monitoring and advising on the implementation of the strategy and then reviewing the performance of the organisation and the CEO relative to this intended organisational strategy (Hitt et al., 2007). Of course, the organisation will need to modify or change the intended strategy as conditions change (e.g. new competitors, customers or regulators) (Simons, 2000). For the board of directors, managing the CEO through control, collaboration or both is part of managing the organisational strategy. The same major tensions which Simons (1995b) identifies for managers also exist for the board of directors. Instead of characterising the CEO's behaviour as either self-serving or collective-serving (or "the desire to contribute", Simons, 1995b, p.153), Simons (1995b) argues there is a tension between the behaviours. This is consistent with the aforementioned pragmatic conception of the CEO's behaviour. Thus neither agency nor stewardship theory have superior explanatory power because in a complex, dynamic social reality, the CEO's behaviour can be both agent-like and steward-like. Therefore, the board of directors needs to use the Levers of Control to moderate the CEO's behaviour.

The Levers of Control provides a framework[1] for describing or prescribing how the board of directors can use accounting and control systems to manage the CEO's behaviour (see figure 1). Beliefs systems – which communicate core values – can encourage the CEO to think in terms of the organisation's best interests. Boundary systems – which monitor risks to be avoided – can curb the myopic tendencies of the CEO. Interactive control systems – which focus on strategic uncertainties – can encourage collaboration between the board of directors and the CEO. Diagnostic control systems – which monitor critical performance variables – can ensure that the CEO is held accountable to the board of directors. However, whether or not any boards of directors use accounting and control systems in this manner is unknown. Contingency theorists have shown that accounting and control systems influence organisational performance, and their design and use is contingent/dependent on a variety of factors such as strategy (Langfield-Smith, 2006). Contingency theory supports Simons (1995b, 2000) argument that organisational performance can be maximised by aligning accounting and control systems – through the Levers of Control – with business strategy. Crowding out theory (Frey and Osterloh, 2002) and cognitive evaluation theory (Deci and Ryan, 2001) supports Simons (1995b, 2000) argument that there is a tension between self-serving and collective-serving behaviour. Empirical evidence also suggests that accounting and control systems can influence people's behaviour and, thus, manage this tension (Bonner and Sprinkle, 2002; Merchant et al., 2003).



[1] While Simons' (1995b; 2000) Levers of Control includes internal controls, these are not included here as internal controls are distinctly different from management control systems (Anthony and Govindarajan, 2007; Merchant and van der Stede, 2007).

Figure 1: The Levers of Control in the Boardroom

5.1. BELIEFS SYSTEMS

Simons (1995b, p.34) defines a beliefs system as "the explicit set of organizational definitions that senior managers communicate formally and reinforce systematically to provide basic values, purpose and direction for the organization." Examples of beliefs systems are mission statements, vision statements, credos and statements of purpose (Simons, 1995b). Accounting and control systems can be used as beliefs systems. Statements of purpose are used to choose and guide the implementation of many accounting and control systems (Simons, 2000; Merchant and van der Stede, 2007). For example, mission and vision statements are incorporated into an organisation's planning and budgeting systems (Langfield-Smith et al., 2006). For example, the successful implementation of activity-based costing is dependent on the organisation having a clear understanding of its purpose and how it fits with the organisation's strategy (Gosselin, 2007; Major, 2007).

Researchers have also found that using beliefs systems does benefit organisations. In a case study of a UK telecommunications firm, Marginson (2002) found that the case firm's use of beliefs systems had a positive effect on managers' values and lead to increasing focus on the firm's interests (or strategic direction). In a longitudinal case study of a Finnish subsidiary firm, Tuomela (2005) found that the firm's performance scorecard acted as a multi-lever of control. As a beliefs system, the performance scorecard communicated the firm's customer focus to managers. As a multi-lever of control, the performance scorecard aligned the managers' interests with those of the subsidiary and parent firms. In a survey of Chief Financial Officers from US firms, Widener (2007) found that the use of beliefs systems focused managerial attention and enhanced organisational learning, which lead to improved firm performance. She also found that "the beliefs system influences and complements each of the other control systems in the [Levers of Control] framework" (p.779). Therefore, the empirical evidence indicates that beliefs systems can direct managers' attention and effort towards the organisation's strategy objectives.

While Simons (1995b, 2000) focuses on the benefits of managers using beliefs systems, he provides few clues about the role of the board of directors. Organisational theorists observe and recommend that the board of directors are/be involved in formulating core values and communicating these through beliefs systems (Hitt et al., 2007). In a survey of US Chairmen and senior executives, Bart and Bontis (2003) found that board and management involvement in developing their company's mission statement has a positive impact on their commitment to the mission and organisational performance. They conclude that "it is recommended that board involvement with a mission's development – and continuous awareness of it – need to be both recognized and formally in an organization's governance structure…" (p.378). Therefore, the board of directors should work with the CEO to formulate and communicate the organisation's core values through the organisation's beliefs systems, and such actions will have positive effects on CEO behaviour and organisational performance.

> **Proposition 1:** If the board of directors and CEO use beliefs systems to implement the organisation's core values, then the CEO will be more likely to pursue pro-organisational behaviour.

5.2. BOUNDARY SYSTEMS

Simons (1995b, p.178) defines a boundary system as "formally stated rules, limits and proscriptions tied to defined sanctions and credible threat of punishment… to allow individual creativity within defined limits of freedom". While beliefs systems are positive forces which give individuals' inspiration, boundary systems are (countervailing) negative forces which constrain individuals' imagination. Examples of boundary systems are codes of business conduct, strategic planning systems, asset acquisition systems, and operational guidelines (Simons, 1995b). Accounting and control systems can be used as boundary systems such as capital and operation budgeting systems which constrain managers' opportunities (Simons, 2000; Merchant and van der Stede, 2007).

Since the Enron and Andersen scandals, the use of codes of ethics in organisations has been debated in the literature (Ghoshal, 2005; Locke, 2006; Fleishman and Funnel, 2007). Professional accounting associations have also sought to hold their members accountable to a higher standard of ethical conduct (Rogers et al., 2005). Such ethical guidelines shape the responsibilities employees and officers have to each other, to clients and to the community (Widener, 2007). Simons (1999, p.93) points out that "Establishing unambiguous boundaries is a quick but effective way of reining in risk and protecting a firm's most valuable asset [– its reputation]." Further, Bhimani (2009, p.2) argues that "enterprises seek not only to adopt risk controls but also to make the deployment of such controls transparent and visible… This makes management accounting, risk management and corporate governance increasingly and inextricably interdependent."

While Simons (1995b, 1999, 2000) focuses on the benefits of managers using boundary systems, he provides few details about the role of the board of directors. Ethics theorists have argued that the board of directors should not only formulate and implement a code of ethics, but also demonstrate their compliance with it (Clark and Leonard, 1998; Schwartz, 2002). Further, the board of directors should have a risk management system to act as an early warning signal (Dulewicz et al., 1995; Mackay and Sweeting, 2002). CIMA (2004) argue that the board of directors can use a strategic scorecard to manage enterprise risk. Risk management systems provide the board of directors with information that can be used to challenge the strategic direction of the CEO, which is critical to effective corporate governance and organisational performance (CIMA, 2004, 2005 2010). Hitt et al. (2005, p.326) argue that "the most effective boards participate actively to set boundaries for their firms' business ethics and values." Therefore, the board of directors should work with the CEO to formulate and communicate the organisation's risks to be avoided through the organisation's boundary systems, and such actions will signal to the CEO what is and is not appropriate behaviour as well as the consequences of inappropriate behaviour, which will act to constrain the CEO's opportunistic tendencies.

> **Proposition 2:** If the board of directors and CEO use boundary systems to monitor the organisation's risks to be avoided, then the CEO will be less likely to pursue opportunistic behaviour.

5.3. INTERACTIVE CONTROL SYSTEMS

Simons (1995b, p.95) defines an interactive control system as "formal information systems managers use to involve themselves regularly and personally in the decision activities of subordinates." Managers only use one accounting and control system interactively (unless facing a crisis) because an interactive control system requires much managerial attention (Simons, 1991, 1995b). Examples of interactive control systems are profit planning systems, project management systems, brand revenue systems, and intelligence systems (Simons, 1995b). When an accounting and control system is used interactively, it should generate data which is regularly discussed and, consequently, stimulates organisational learning (Simons (1999).

In a survey of large Spanish manufacturing firms, Bisbe and Otley (2004) found that high interactive use of management control systems enhanced organisational performance. In a case study of a Finish subsidiary, Tuomela (2005) found that there are both benefits and costs of using a strategic scorecard interactively. Benefits included improving the commitment of managers to strategic targets and the quality of decision-making. Costs included resistance to the new management techniques and the amount of managerial time required. In a survey of large US firms, Widener (2007) found that while firms use interactive control systems to manage competitive uncertainties and operational risks, using interactive controls systems did not contribute to organisational learning. The benefits of using interactive control systems did, however, outweigh the costs as they positively contributed to organisational performance.

However, these studies do not provide any evidence that the board of directors uses an accounting and control system interactively. After all, interactive control systems are supposed to stimulate ideas from the bottom-up and empower lower-level managers and employees to think creatively (Simons, 1995b; Simons, 2000). On the other hand, an interactive control system manages strategic uncertainties which vary at different levels in the organisation (e.g. the board of directors is concerned with organisational strategy, while a division manager is concerned with business strategy). CIMA (2004, 2010) argue that the board of directors should have an active role in formulating, implementing, and monitoring organisational strategy. Tricker (2009) argues that the board of directors should be focused on the future to ensure that the organisational strategy is attained; whereas boards of directors focus too heavily on the past, to their detriment. Therefore, the board of directors should use the organisation’s interactive control systems to engage in dialogue and debate with the CEO in order to manage the organisation’s strategic uncertainties, and such actions will have positive effects on CEO behaviour and organisational performance.

> **Proposition 3:** If the board of directors and CEO use an interactive control system to stimulate dialogue and debate about the organisation’s strategic uncertainties, then the CEO will be more like to pursue pro-organisational behaviour.

5.4. DIAGNOSTIC CONTROL SYSTEMS

Simons (1995b, p.59) defines a diagnostic control system as “the formal information systems that managers use to monitor organizational outcomes and correct deviations from preset standards of performance.” Examples of diagnostic control systems are profit plans and budgets, goals and objectives systems, project monitoring systems, brand revenue monitoring systems, and strategic planning systems (Simons, 1995b). These examples are recognised as accounting and control systems (Simons, 2000; Merchant and van der Stede, 2007). Managers use diagnostic control systems to monitor critical performance variables and associated financial and non-financial targets. Incentive schemes are linked to these targets to motivate managers and employees. Managers need to design diagnostic control systems carefully to avoid manipulation (Simons, 1995a, 2000). Once targets are set, managers only need to follow-up on significant variances. Diagnostic control systems allow managers to control operations remotely and focus their attention on strategic uncertainties (Simons, 1995b, 2000).

Simons (1995b, 2000) focuses on (senior) managers and does not discuss how the board of directors might use diagnostic control systems to monitor the CEO. Some studies suggest that boards of directors do not use budgets to effectively monitor strategic and financial outcomes (Stiles and Taylor, 2001; Parker, 2003, 2007). In the wake of Enron and other corporate scandals, CIMA (2003, 2004, 2005, 2007a, 2009a, 2010) has argued that the board of directors should implement and monitor diagnostic control systems – although CIMA does not use this term – such as strategic planning systems, strategic (balanced) scorecards and enterprise risk management systems. CIMA (2004) contends that these diagnostic control systems can focus the attention of the board of directors on organisational strategy and lead to improved performance. This is consistent with Simons (1995b, 2000) claims and Widener (2007) empirical evidence that diagnostic control systems can improve managerial attention and learning and, ultimately, organisational performance. Therefore, the board of directors and the CEO should use diagnostic control systems to monitor the organisation's critical performance variables, the board of directors should hold the CEO accountable for achievement of mutually agreed upon targets, and such actions will constrain the CEO's opportunistic tendencies.

> **Proposition 4:** If the board of directors and CEO use diagnostic control systems to monitor the organisation's critical performance variables, then the CEO will be less likely to pursue opportunistic behaviour.

5.5. Using accounting and control systems as levers of control

CIMA (2004) argues that enterprise governance has two dimensions: conformance and performance. Conformance processes ensure that directors and executives are accountable for their actions and the information they produce (e.g. corporate annual report) is assured. The board of directors and executives can use performance processes to align the organisational strategy with the organisation's structure and systems. If these processes are carried out effectively, then the organisation's performance will be maximised (Langfield-Smith, 2006). Accounting and control systems have a significant role in assisting the board of directors to their conformance and performance roles. Robert Simons' Levers of Control provide a framework for determining how the board of directors can utilise accounting and control systems. The empirical evidence from below the governance-level suggests that "managers must consider all four control systems when designing their control system" (Widener, 2007, p.782). There is no reason to believe that these findings are not also applicable at the governance-level, although future research is needed to verify this supposition. This paper has argued that the board of directors can use beliefs and interactive control systems to encourage the CEO to act in organisation's best interests, and use boundary and diagnostic control systems to discourage the CEO to act opportunistically. Therefore, as the CEO is part-agent and part-steward, the board of directors needs to both control and cooperative with the CEO to minimise agency costs and maximise organisation performance, and such actions can be facilitated through accounting and control systems.

> **Proposition 5:** If the board of directors uses accounting and control systems to monitor and collaborate with the CEO, then both agency costs will be minimised and organisational performance will be maximised.

6. DISCUSSION

This paper has argued that the board of directors can use the Levers of Control to moderate the CEO's behaviour and, consequently, minimise agency costs and maximise organisational performance. This line of reasoning is somewhat overly-simplistic and idealistic. While the CEO is characterised as part-agent and part-steward, this is not a dynamic model of human behaviour. Further research into how the CEO's behaviour changes over time and what triggers these changes is needed. Simons (1995b, 2000) contends that the Levers of Control manage the tension between self-serving and collective-serving behaviour, but this has yet to be empirically tested. The literature has found that humans do respond to accounting and control systems, particularly incentive schemes in varying ways (Bonner and Sprinkle, 2002; Merchant et al., 2003). However, the influence of accounting and control systems on CEO behaviour has received scant attention. Further, the applicability of the Levers of Control to the governance-level, rather than the divisional-level has not been researched. CIMA (2004) argues that enterprise governance includes conformance and performance processes, and these are consistent with the Levers of Control. But researchers have yet to comprehensively study how the board of directors use accounting and control systems. The majority of the literature on corporate governance and management accounting is normative (e.g. CIMA, 2003, 2004, 2005, 2007a, 2009a, 2010) or theoretical (e.g. Seal, 2006). As this paper is theoretical, practitioners are advised not to view the propositions in this paper as a prescription for enhancing organisational performance. Such as view, as Sumantra Ghoshal would have said, is bad for practice. Further qualitative and quantitative research is needed to investigate how accounting and control systems are used in the boardroom.

The propositions presented in this paper are not un-testable, but too broad to be tested in their current form. As aforementioned, there is scant research that has studied how boards of directors employ accounting and control systems, and no research that has studied Simons' Levers of Control framework at the governance-level. Descriptive case studies can explore the interface between management accounting and corporate governance. There are many unexplored questions related to how much attention directors give to planning, budgeting, costing, and performance measurement systems. The board of directors is cast as the approver of plans and budgets (Mace, 1971), but regulators and professional associations around the world now expect the board of directors to have an active role in directing the organisation (Monk and Minow, 2004; Solomon, 2007). Tricker (2009) highlights that boards of directors still see their role as focused on providing accountability, and monitoring and supervising; whereas he argues that they should be focused on strategy formulation and policy making. In any case, accounting and control systems can provide information to support these roles. Using the Levers of Control framework to frame descriptive case studies will help researchers understand how directors balance these competing roles.

Roberts et al. (2005, pp.S21-S22) argue that research should "identify… the keys conditions and behaviours that promote effective and intelligent accountability within boards." The Levers of Control framework provides researchers with the tools to assess the effectiveness of the board of directors. Beliefs, boundary, interactive control and diagnostic control systems are all necessary for effective management (Simons, 1995; Ferreira and Otley, 2009). At this point, there is no reason to believe that this is not also true for effective governance. Researchers will need to use employ a variety of research methods to not only describe what accounting and control systems boards of directors use, but to assess the effectiveness of the boards of directors use of these systems and the effectiveness of these systems at providing useful information to directors. Interviewing a large sample of directors and executives will provide researchers with a deeper understanding of these issues.

Qualitative research methods can be employed to study and further refine the propositions presented in this paper. The Levers of Control have been studied through case studies (e.g. Simons, 1990, 1991; Marginson, 2002; Toumela, 2005). Researchers could interview and observe boards of directors (e.g. Parker, 2003, 2007, 2008) in order to describe what accounting and control systems are employed, and explain how and why certain systems are favoured. Case studies should describe how, for example, diagnostic controls differ from interactive controls at the governance-level. Typically, boards of directors meet infrequently at least formally, but interactive control requires ongoing dialogue and debate. Perhaps boards of directors use phone calls and emails to discuss pertinent issues in between formal meetings and the issues discussed arise from the interactive control system. Diagnostic control requires period monitoring and investigation. Boards of directors receive reports from management prior to formal meetings (Tricker, 2009). These reports can include a wide range of information, and boards of directors most likely do not investigate the performance reported unless it is outside their expectations.

The traditional characterisation of the board of directors fits with boundary and diagnostic control systems, rather than beliefs and interactive control systems. Case studies should examine whether interactive controls are critical to improve the effectiveness of the board of directors. Researchers could employ both present and historical case studies to investigate these gaps in knowledge. Interviews or participant observation could be used to study boards of directors, but Leblanc and Gilles (2005) note that gaining access to directors, particular board meetings is difficult. Johanson (2008) argues that historical case studies provide a rich source of untapped data. For example, many organisations maintain archives which typically include the minutes from the meetings of board of directors. Gaining access to these archives can be problematic if the company still exists, but many archives from defunct companies are also preserved.

Quantitative research methods can be employed to validate or falsify the propositions presented in this paper. The Levers of Control have been studied through surveys (e.g. Simons, 1987; Bisbe and Otley, 2004; Widener, 2007). The propositions in this paper are too broad as all accounting and control systems are treated equally. Drawing on case studies or using pilot testing of survey instruments, researchers should focus on specific accounting and control systems which boards of directors are most likely to use. Mission and visions statements, codes of ethics, strategic plans, budgets and scorecards are the most obvious starting point. Surveys can be used to which accounting and control systems are used by boards of directors, and then how they use them (e.g. diagnostic vs. interactive). A measure of firm performance should be included in the survey, so that the benefits of using accounting and control systems in accordance with the Levers of Control framework can be assessed.

7. CONCLUSION

Agency and stewardship theory have opposing assumptions and predictions with respect to CEO behaviour and the role of the board of directors. The empirical evidence has not clearly favoured one theory over the other, although agency theory is more popular amongst academics (Davis et al., 1997; du Plessis et al., 2005; Kang and Zardkoohi, 2005; Lubatkin, 2005). This paper argues that adopting a more realistic model of human behaviour and boardroom dynamics will resolve the impasse. Further, this paper draws on Robert Simon’s Levers of Control framework to explain how the board of directors can manage the CEO. It is argued that to maximise organisational performance, the board of directors needs to use accounting and control systems to implement strategy and moderate the CEO’s behaviour. Essentially, this paper has laid the foundations of a combined agency-stewardship theory of corporate governance. However, it is acknowledged that such a theory is in its early stages of development. CEO behaviour has been scantly studied in psychology. The interface between corporate governance and management accounting has also received little academic attention (Seal, 2006). Further, studies using the Levers of Control framework have been focused at the division-level of organisations, rather than the governance-level. Therefore, it is hoped that this paper will stimulate much discussion, debate and, ultimately, research, so that the use of accounting and control systems in the boardroom can be better understood.

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