

Enterprise governance and value-based management: a theoretical contingency framework

Adel Elgharbawy · Magdy Abdel-Kader

Published online: 5 May 2012
© Springer Science+Business Media, LLC. 2012

Abstract In an attempt to provide a better understanding of the tension between conformance and performance in the governance context, this study develops a conceptual model for enterprise governance (EG) from the contingency theory perspective. The study argues that the value-based management (VBM) approach can achieve the objectives of EG, keeping the right balance between conformance and performance. Therefore, the study investigates the implications of fit between four contingency factors and VBM on organisational performance using corporate governance (CG) mechanisms and corporate entrepreneurship as mediating factors. The study contributes to the literature by linking a performance management system, i.e. VBM, to the EG framework aiming to bridge the gap between management accounting, CG, and entrepreneurship disciplines.

Keywords Value-based management · Enterprise governance · Corporate governance · Corporate entrepreneurship · Contingency theory

1 Introduction

Corporate governance (CG) received much attention because of the wave of financial scandals in the early 2000s and the more recent global financial crisis (Moxey and Berendt 2008). CG reforms including laws, codes, principles, and listing rules have been established to protect shareholders' rights, and restore

A. Elgharbawy
Brunel Business School, Brunel University-London, Kingston Lane, Uxbridge UB8 3PH, UK
e-mail: adelgharbawy@hotmail.com

M. Abdel-Kader (✉)
The Lord Ashcroft International Business School, Anglia Ruskin University,
Bishop Hall Lane, Chelmsford, Essex CM1 1SQ, UK
e-mail: m.g.abdelkader@gmail.com

investors' confidence in capital markets. From the agency theory perspective, these reforms have largely contributed to the evolution of governance mechanisms that aim to mitigate the agency conflicts between managers and shareholders that result from the separation between ownership and control (Jensen and Meckling 1976; Dey 2008).

However, overemphasis has been placed on the monitoring and control dimensions of governance, which may hinder the entrepreneurial activities, obscure business prosperity, and contribute to a narrow perspective on CG (Filatotchev and Wright 2006). For instance, in the UK, the Cadbury report (1992) has been criticised as being too prescriptive, focusing on accountability aspects of governance, and risking damaging the spirit of enterprise necessary for economic success (Short et al. 1999). Recently, Larcker et al. (2011) provide some evidence for negative stock price reactions to the recent governance regulations in the USA following the financial crisis.

It has been argued that there is a need to broaden the concept of governance beyond the compliance to a set of CG rules and laws (conformance) that ensure accountability, to include the performance aspects of governance that focus on strategy and value creation (performance) (Busco et al. 2005). For instance, Short et al. (1999) argue that governance in a broader definition should not only focus on monitoring managerial performance to ensure accountability to shareholders, but also mechanisms for motivating management to maximise shareholders' wealth should be included. However, the literature suggests a potential trade-off or tension between the conformance and performance dimensions of governance (Cornforth 2004; Spira and Bender 2004; Kovacevic 2009). The tension basically arises because the board of directors is required to play a dual role and to act in two different ways (Cornforth 2004). While the conformance role is reactive, risk-averse, and more focused on monitoring, the performance role is more proactive, risk-taking, and more focused on value creation (Cornforth 2004).

The framework that addresses the tension between the conformance and performance dimensions is called enterprise governance (EG) (Connell 2004) or integrated governance (Busco et al. 2005). However, very little is known about this framework and the tools that can help companies to ensure accountability of management to shareholders without obscuring business prosperity and enterprise.

The recent financial crisis has deepened the ongoing debate about increasing shareholder power and whether it is part of the problem or should be part of reform (Bebchuk and Weisbach 2010). Arguably, Value-based Management (VBM) can be considered an appropriate approach to keep balance between conformance and performance and to achieve the objectives of EG (Starovic et al. 2004).

VBM adopts shareholder value creation as an overall objective, and develops strategies, organisational design, action plans, value drivers, and performance measures that are aligned with this objective (Ittner and Larcker 2001). Accordingly, VBM mitigates the agency conflicts between managers and shareholders (Stewart 1991; Lovata and Costigan 2002), aligns their interests (Mc Laren 2000), and creates shareholder value (Crowther 2003). VBM has the potential to bring the two dimensions of EG (conformance and performance) closer and to keep balance

between them (Starovic et al. 2004). Nonetheless, the potential role of VBM in achieving the EG objectives has received little attention in the literature.

This study aims to address the tension between conformance and performance in the governance context through developing a conceptual model for EG and assessing to what extent VBM can achieve the EG objectives. The model operationalises conformance using CG and performance using corporate entrepreneurship (CE). More specifically, the objectives of this study are fourfold: first, to theoretically examine the association between four contingency factors (environmental uncertainty, strategy, size, and agency conflicts), VBM, CG, and CE; second, to theoretically investigate whether a fit between these contingency factors, VBM, CG, and CE is associated with organisational performance; third, to theoretically assess the ability of VBM to keep balance between conformance and performance through examining its association with CG and CE; fourth, to theoretically assess the possible tension between conformance and performance through examining the association between CG and CE.

This study is multidisciplinary, as it attempts to bridge the gap between management accounting, CG, and entrepreneurship disciplines. Unlike previous studies, adopting a holistic approach that investigates the inter-relationships between VBM, CG, and CE as important predictors of organisational performance provides insights into the complementary or conflicting relationships among these predictors in their effects on organisational performance. Further, using a contingency theory perspective can reconcile the conflicting results regarding the superiority of value-based measures over traditional performance measures, and the effects of both CG and CE on organisational performance. This can lead to a better design for performance management systems (PMSs), CG structure, and CE engagements taking into consideration the contextual and organisational factors. Understanding the effect of CG mechanisms on CE and organisational performance can help policy-makers and regulators in deciding the appropriate level of governance regulation that ensures accountability without sacrificing enterprise.

2 Literature review

Four streams of literature can be identified as relevant to this study, namely: EG, VBM, CE, and contingency theory. Each stream of literature will be briefly reviewed in this section.

2.1 Enterprise governance (EG)

In an attempt to bridge the gap between CG studies and business success literature, the EG framework has been introduced (Connell 2004). EG can be defined as a “set of responsibilities and practices exercised by the board and executive management with the goal of providing strategic direction, ensuring that objectives are achieved, ascertaining that risks are managed appropriately and verifying that organisation’s resources are used responsibly” (Information Systems Audit and Control Federation, 2001, cited in Connell 2004).

The relationship between conformance and performance in the governance context has been addressed using different frameworks. These frameworks are based on the notion that the spirit of EG must work within a sound framework of accountability, and the balance between them is crucial (Clarke 1998). In other words, governance mechanisms should ensure accountability, but not at the expense of enterprise. In addition, these frameworks focus on the dual role of the board of directors in governance (Huse 2007). This role includes protecting shareholder rights through ensuring accountability, meanwhile, enhancing value creation by providing knowledge and resources that help managers to assume the risks that benefit shareholders through improved performance (Zahraa et al. 2009).

One of the earliest frameworks was introduced by Keasey and Wright (1993) proposing a governance framework based on two key elements: supervising or monitoring management performance (including mechanisms such as non-executive directors, executive remuneration and market for corporate control); and ensuring accountability of management to shareholders and other stakeholders (including mechanisms such as audit committees and auditors). Arguably, the two aspects are closely inter-related and serve both efficiency and stewardship dimensions of CG (Keasey and Wright 1993).

Similarly, Tricker (1997) developed a framework of board activities identifying two basic roles: performance role contributes to the long term performance of the company through strategy formulation, policy-making, and producing guidelines to direct management decisions; and conformance role ensures that management complies with policies, plans, and regulations. However, these roles are seen as completing each other rather than being conflicting (Spira 2001).

In a broader systematic view, Charkham (1995) conducted a comparative study of CG in five countries. The study identified two main criteria for assessing CG systems: dynamism that enables the management of company to drive it forward without undue fear of governmental interference, litigation or displacement; and accountability that ensures that management is accountable for its decisions and actions. However, this framework did not provide any implications for possible conflict between the two criteria (Spira 2001).

Connell (2004) developed an EG framework comprising conformance and performance dimensions. The basic notion of this framework is that good CG or conformance on its own cannot make a company successful; the performance dimension which focuses on strategy and value creation should be considered. The framework suggests that conformance feeds directly to accountability and indirectly to value creation; and performance feeds directly to value creation and indirectly feeds to accountability (Connell 2004). Accordingly, implications of the complementary relationship between the two dimensions exist in this framework.

Busco et al. (2006) added a third dimension to conformance and performance related to knowledge-based governance. This dimension manages the processes of learning and knowledge sharing through knowledge management, learning processes, organisational culture, and value. This study provides empirical evidence supporting the role of PMSs in achieving the EG objectives.

Spira (2001) argues that the literature is dominated by the agency theory perspective, where systems are assessed based on the level of alignment achieved

between the agent and the principal interests. From this perspective, enterprise can be seen as a part of the governance system rather than conflicting with it. However, some theoretical frameworks that focus on entrepreneurial activities have challenged the basic assumptions of agency theory. For instance, O'Sullivan (2000), based on empirical data from the USA and Germany, argues that the market for corporate control as a governance mechanism negatively affects innovation and hinders enterprise.

In summary, there is no agreement among these few studies on the relationship between accountability and enterprise in the governance context, at either organisational or systematic levels (Spira 2001). For instance, it has been argued that overemphasis on accountability obscures business prosperity and constrains enterprise (Hampel Report 1998; Short et al. 1999). On the other hand, other scholars such as Tricker (1997), Charkham (1998), and Connell (2004) argue for no trade-off between enterprise and CG mechanisms. Nonetheless, neither view is firmly supported with empirical evidence which raises the need for further research in this area (Spira 2001). Furthermore, Short et al. (1998, 1999) argue that the effect of governance on accountability and enterprise remains poorly understood, especially in the UK, and the link between academic research and practice in this area is weak at best.

2.2 Value-based management (VBM) approach

VBM became popular in the mid-1980s when Rappaport (1986) published his seminal text, creating shareholder value: the new strand for business performance. Companies such as Boots, Lloyds TSB and Cadbury Schweppes were soon making explicit public commitments to increasing value for their shareholders (Starovic et al. 2004). The focus on value creation was triggered by a more competitive environment, increased investor activism (Athanasakos 2007), emergence of active market for corporate control (Copeland et al. 2000), expansion of institutional investment, more liquid securities market (Young and O'Byrne 2001), and impressive endorsements by corporate leaders who have adopted the approach (Fahi et al. 2005). According to the International Federation of Accountants (IFAC 1998), VBM can be considered the latest evolutionary stage in management accounting practices where the attention has been focused on the creation of value through using techniques and technologies that identify the key drivers of customer value, shareholder value, and organisational innovation (Ittner and Larcker 2001).

VBM is a managerial approach where the company's overall aspiration, strategies, analytical techniques, management processes, performance measurements, and culture are aligned in order to achieve the ultimate objective of shareholder wealth maximisation by focusing on the key value drivers (Copeland et al. 2000; Arnold 2008). Theoretically, VBM involves a shift away from the use of traditional accounting measures such as earnings per share and net profit, which arguably offer an unreliable guide to 'shareholder value creation', to a number of alternative measures such as economic value added (EVA) and cash flow return on investment (CFROI) that are intended to provide a 'calculating machine' consistent with the principles of economic income (Bromwich and Walker 1998). These

measures have in common the basic premise that profit needs to be measured in a way that takes into account the cost of the capital employed to generate it.

Proponents of VBM argue that VBM implementation leads to shareholder value creation (Crowther 2003), reduces both moral hazard problem and agency costs, and better aligns the interests of management and shareholders (Stewart 1991; Aggarwal 2001; Lovata and Costigan 2002; Ryan and Trahan 2007). However, VBM has been challenged with the growing and continuing debate on the importance of shareholder value relative to other measures such as employment, social responsibility, and environment (Copeland et al. 2000). Accordingly, reconciling the competing claims of shareholders and other stakeholders has become crucial (Mills and Weinstein 2000).

Furthermore, calculating value-based measures (e.g. EVA) is rather complicated. VBM implementation is not an easy process and is costly (Lovata and Costigan 2002; Haspeslagh et al. 2001). Consequently, it has been claimed that interest in VBM approaches has decreased with the growing interest in society, environment and the starting of a more socially responsible era of business with different concerns to the maximisation of shareholder value. However, it is believed that it provides a good opportunity to study the phenomenon as a completed cycle (Cooper and Crowther 2008). Further, management accounting research has been criticised as being more driven by changes in practice, making some research topics tend to disappear as the next 'innovation' emerges, even though earlier innovations may have not been fully investigated (Ittner and Larcker 2001).

It has further been argued that value-based measures (especially EVA) are more correlated to the share price than traditional accounting measures (e.g. EPS and ROI) and they are better used as predictors of stock return (Ittner and Larcker 1998, 2001). However, the results of these studies are mixed. For instance, Stewart (1991, 1994), Grant (1996), Lehn and Makhija (1997), Young and O'Byrne (2001), Athanassakos (2007), Ryan and Trahan (2007), and Rapp et al. (2011) have supported the claims of superiority of value-based measures over traditional accounting measures in explaining stock returns. On the other hand, some other studies such as Dodd and Chen (1996), Chen and Dodd (1997), Biddle et al. (1997), and Bao and Bao (1998) have provided some evidence against value-based measures in terms of its explanatory power of stock returns and information content. Despite the fact that VBM is not entirely a new approach, yet the debate about the superiority of value-based measures over traditional accounting measures in the literature has not been resolved (Ittner and Larcker 2001).

In addition, little attention has been paid in the VBM literature to the extent of preferring these measures for management planning; evaluating management performance and control purposes (Ittner and Larcker 2001). There is no clear evidence whether the organisations that use value-based measures as internal performance measures for performance measurement and compensation purposes can outperform organisations that use PMS based on other performance measures (Zimmerman 1997; Ittner and Larcker 2001; Francis and Minchington 2002). The mixed results of these studies have been partially explained by deficiency in the implementation of VBM (Slater and Olson 1996; Bannister and Jesuthasan 1997; Armour and Mankins 2001; Haspeslagh et al. 2001; Morisawa and Kurosaki 2002).

This study argues that in addition to the implementation-related factors, contingency factors can play an important role in explaining such mixed results. This argument is supported with the results of previous studies such as Anderson and Young (1999), which concluded that success or failure of sophisticated accounting techniques may not only be related to implantation-related factors but also to more general contingent factors related to the organisation characteristics and its environment. Accordingly, the enhanced performance outcomes depend on how different types of PMSs best suit, or fit, with an organisation's specific context (Tillema 2005; Chenhall 2006). Therefore, some recent studies in the VBM literature, such as Athanassakos (2007), Cooper and Crowther (2008), and Lueg and Schaffer (2010), suggest that using the contingency theory approach towards studying VBM can help to explain the mixed results (see Sect. 2.4 for more details).

2.3 Corporate entrepreneurship (CE)

The importance of CE for the successful performance of a company has risen as a result of the increasing intensity of competition at both domestic and global levels, as it can help in acquisition of new capabilities, developing new venture streams, and improving performance (Lumppkin and Dess 1996; Rauch et al. 2009). Entrepreneurial orientation (EO) (Lumppkin and Dess 1996), intrapreneurship (Antoncic and Hisrich 2001), corporate venturing (Vesber 1990), innovative (Miller and Friesen 1982; Miller 1988) and entrepreneurial strategy (Dess et al. 1997), and entrepreneurial posture (Covin and Slevin 1991) have been used to describe the construct of CE (Antoncic and Hisrich 2004).

CE can be defined as “the sum of a company's innovation, renewal, and venturing efforts. Innovation involves creating and commercialising products and technologies, providing financial and human resources for innovative projects, and maintaining an appropriate infrastructure for innovation. Renewal means revitalising a company's business through innovation and changing its competitive profile. Venturing requires creating and nurturing new business in current and new industries” (Zahra 1995: p. 227).

Thus, CE is a multi-faceted construct and scholars have used many typologies to capture alternate dimensions of entrepreneurship (Miller 1983; Covin and Slevin 1989; Lumppkin and Dess 1996; Short et al. 2010). Based on Miller's conceptualisation, three dimensions have been identified and commonly used in the literature: innovativeness, risk-taking, and proactiveness. Innovativeness is the company tendency to engage in and to support creating new ideas through developing new products/services as well as technological leadership via R&D in new processes (Lumppkin and Dess 1996; Rauch et al. 2009). Risk-taking is the level to which managers accept making large and risky resources commitments (Miller and Friesen 1978). Proactiveness refers to “seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, strategically eliminating operations which are in the mature or declining stages of life cycle” (Venkatraman 1989: p. 949).

Further, Lumpkin and Dess (1996) suggested autonomy and competitive aggressiveness dimensions as additional components of the CE construct. Autonomy refers to the ability to take action free of organisational constraints (Lumpkin and Dess 1996; Lumpkin et al. 2009), while competitive aggressiveness reflects how companies react to the existing competitive trends and demands in the market (Lumpkin and Dess 2001). Although these efforts have contributed to capturing the various dimensions of CE, there is no consensus about what constitutes entrepreneurship. The lack of consensus has encouraged researches towards building and testing a broader theory of entrepreneurship which made it difficult for them to investigate the relationship between entrepreneurship and performance (Lumpkin and Dess 1996).

CE has been argued as being important for a company's survival, profitability, and growth (Zahra 1996; Zahra et al. 2009). Therefore, CE has been regarded as an essential element of successful companies (Thornhill and Amit 2001; Miles and Covin 2002; Antoncic and Prodanb 2008). However, the significance of the relationship between CE and business success varies among studies (Rauch et al. 2009). While some studies have concluded that companies that are highly entrepreneurial outperform companies that are less entrepreneurial (e.g. Hult et al. 2003; Avlonitisa and Salavoub 2007), other studies found a lower correlation between CE and performance (e.g. Zahra 1991; Lumpkin and Dess 2001) or even no significant relationship at all between CE and performance (e.g. Covin et al. 1994). A recent study by Rauch et al. (2009) has involved a meta-analysis exploring the magnitude of the relationship between CE and performance in more than 50 studies from the literature. The results in general support the argument of having positive performance implications for CE. Moreover, the results of previous studies suggest some contingency factors to moderate the relationship between CE and performance which is consistent with the basic assumptions of contingency theory (Rauch et al. 2009).

2.4 Contingency theory perspective

Contingency theory has been an important approach to the study of organisations and the role of management accounting within organisations (Chenhall 2003, 2007). It has a long tradition dating back to the mid-1970's (Chapman 1997; Otley 1980; Cadez and Guilding 2008) with the early works of Bruns and Waterhouse (1975) and Gordon and Miller (1976). Eventually, it has become a dominant paradigm in empirical management accounting research (Otley 1980; Fisher 1995; Cadez and Guilding 2008) despite the criticisms of inconsistencies in the findings (Chenhall 2003, 2007; Abdel-Kader and Luther 2008), and the wide range of definitions of variables and underspecified models used in these studies (Otley 1980; Fisher 1995; Langfield-Smith 1997; Gerdin and Greve 2004).

The contingency approach is based on the basic notion that there is no unique best structure that fits all companies regardless of surrounding circumstances; instead each organisational structure is a response to a set of contingencies (Otley 1980). Accordingly, there is no universally appropriate accounting system that is applicable to all organisations (Emmanuel et al. 1990). Alternatively, the

characteristics of the appropriate accounting system depend on the context and the circumstances in which an organisation operates, and the effectiveness of the design of this system depends also on its ability to adapt to changes in contextual factors (Haldma and Laats 2002; Abdel-Kader and Luther 2008).

Contingency-based research has focused on a variety of aspects of management control systems (MCSs) and management accounting practices as important aspects of MCSs. These include practices such as activity-based costing, activity-based management (Anderson and Young 1999; Gosseline 1997), non-financial performance measures (Ittner and Larcker 1998), balanced scorecards (Davis and Albright 2004; Hoque and James 2000), variance analysis (Emsley 2000) and economic value analysis (Biddle et al. 1997).

However, research as to the advantages of value-based measures is limited and the results are equivocal (Ittner and Larcker 1998; Chenhall 2006). The lack of evidence on the superiority of value-based measures raises some important questions. For instance, is value-based measures best suited to different contextual settings? And is the contingency theory an appropriate framework to address this issue (Chenhall 2006)? The use of contingency theory in management accounting has been justified as a means of interpreting the results of empirical research (Otley 1980). This argument has been supported by a call from many scholars (e.g. Ittner and Larcker 1998; Chenhall 2006; Lueg and Schaffer 2010) to develop a contingency framework to explain the mixed results of VBM studies. Though there is little direct evidence in the literature on contingency relationships with value-based measures, there are some clues which indicate that factors such as environmental uncertainty and strategy are important in explaining performance measures choices (Chenhall 2006).

The potential contingency relationships between contextual and organisational factors are not limited to VBM only. The literature suggests the relationship between CE and performance to be contingent upon external environment factors such as dynamism (Lummpkin and Dess 1996; Dess et al. 1997; Antoncic and Hisrich 2001), technological opportunities (Zahra 1993a; Rauch et al. 2009), industry growth (Zahra 1993b; Antoncic and Hisrich 2004), and demands for new products (Zahra 1993b), in addition to organisational factors such as size of business (Rauch et al. 2009), strategy (Lummpkin and Dess 1996; Dess et al. 1997), and structure (Lummpkin and Dess 1996). However, prior research has been criticised for being more focused on examining the correlation between one or more of organisational and environmental factors and CE rather than building and exploring a CE model (Antoncic and Hisrich 2004). There is no consensus on what constitutes suitable moderators or contingency factors, and more research in this area is much needed (Rauch et al. 2009).

Similarly, the literature suggests contingency relationships between some contextual and organisational factors such as agency conflicts and CG (e.g. Ang et al. 1999; Singh and Davidson 2003; Dey 2008; McKnight and Weir 2009).

These potential contingency relationships between contextual and organisational factors and VBM, CG, and CE are explained next.

3 The conceptual model

This study aims to develop a contingency model for EG proposing the VBM approach to address the gap in the performance dimension and to keep balance between conformance and performance. The conformance dimension has been extensively covered in the literature and can be addressed with CG codes and/or standards provided that they are subject to assurance/audit (Connell 2004) and well established oversight mechanisms and tools (e.g. audit committees and non-executive directors) can be used to ensure accountability (Gillian 2005; Bhimani and Soonawalla 2005).

Performance dimension relates to strategy and value creation (Gillian 2005) where assurance by means of standards and audit is not feasible (Bhimani and Soonawalla 2005). Alternatively, companies can rely on best practice tools and techniques to address the oversight gap in the performance dimension (Connell 2004). Performance oversight mechanisms include strategic committee at the board level (Connell 2004), strategic scorecard (Connell 2004), and PMSs such as balanced scorecard (Busco et al. 2006) and EVA (Bhimani and Soonawalla 2005). However, there is no agreement in the literature on the best tools that can be used to address the performance oversight gap. This study suggests the use of the VBM approach to address the oversight gap in the performance and achieve the objectives of EG. To our knowledge, no previous study has assessed this potential use of VBM.

Unlike Connell (2004) who defines the performance dimension in terms of strategy and strategic decision-making (Gillian 2005), this model redefines the performance dimension in terms of entrepreneurial activities (CE) necessary to increase the wealth of business (Zahra 1996). CE is as important as strategic management and arguably they complement each other in creating wealth (Ireland et al. 2001, 2003). While strategic management focuses on developing sustainable competitive advantage (Ireland et al. 2003), CE focuses on the process that leads to venture creation (Cooper et al. 2000).

This model builds on the notion that organisational performance represents the outcome of interaction between accountability and enterprise (Short et al. 1999). To achieve a greater performance the company should adopt a set of CG mechanisms to ensure accountability (Connell 2004), meanwhile, the management of the company should be engaged in entrepreneurial activities that lead to value creation (Zahra 1996). Consequently, the VBM approach is assessed in terms of its influence on both CG and CE as important drivers (mediators) for organisational performance.

Moreover, the model draws on the premise of contingency-based studies in management accounting (Chenhall 2007; Abdel-Kader and Luther 2008), CE (Lumpkin and Dess 1996; Rauch et al. 2009), and CG (Dey 2008) to develop a better understanding for the implications of fit between four contextual factors and VBM, CG, and CE within the EG framework. The basic assumption of the contingency theory is that organisational performance is an outcome of an appropriate fit between the structure and contingency factors (Cadez and Guilding 2008). Following Gerdin and Greve's (2004) hierarchical taxonomy of forms of fit, a Cartesian-contingency-mediation form of fit is used. In other words, the model suggests that under certain circumstances, VBM, CG, and CE contribute to a greater

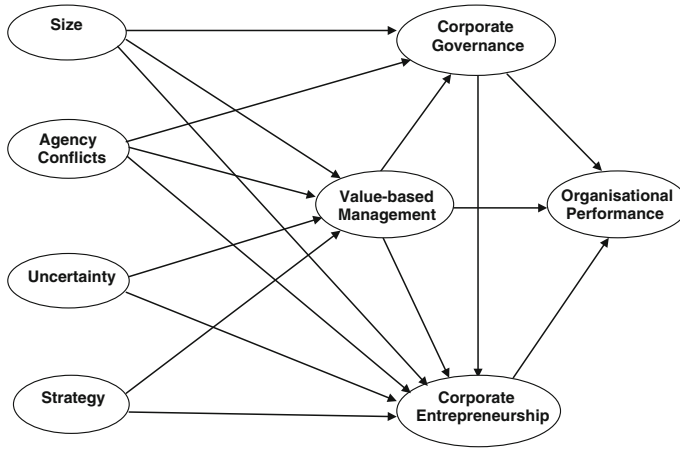


Fig. 1 A contingency model for EG and VBM

organisational performance where the contingency factors are relevant for each practice. Further, the model suggests an indirect effect of VBM implementation on organisational performance through influencing CG mechanisms and CE as mediating factors (see Fig. 1).

Prior VBM studies suggest some contingency factors (e.g. environmental uncertainty, strategy) that make VBM implementation more appealing (Chenhall 2006). Similarly, in the CE literature some key contingencies have been suggested (e.g. environmental uncertainty, strategy) (Lumpkin and Dess 1996). Limited numbers of contingencies have been suggested (e.g. agency conflicts) in CG studies (Dey 2008). However, this model comprises four key contingencies (agency conflicts, company size, environmental uncertainty, and strategy) that have a significant influence on VBM, CG, and CE practices in common. While investigating the inter-relationships between the contingency factors is beyond the objectives of this study, choosing these contingency factors can be justified as follows:

First, given the research problem that embarks on the existence of agency problems as a result of the separation of ownership and control, the agency conflicts can be considered as an important contingency factor affecting VBM, CG, and CE practices.

Second, company size causes agency problems in different ways (Jones and Bulter 1992). For instance, when the company grows, the managers of the company tend to reduce risk through more focusing on control functions on the expense of income producing functions (Ettlie 1983) and developing more bureaucratic procedures (Jones and Bulter 1992). In addition, the increased size leads to increase in the moral hazard problem as the number of agents involved in the entrepreneurship process increases (Jones and Bulter 1992).

Third, it has been argued that agency problems resulting from separation between ownership and management such as moral hazard (Jensen and Meckling 1976) and risk aversion (Jensen 1986) are only problems under uncertainty conditions

(Jones and Bulter 1992). Besides, uncertainty adds some difficulties to the process of evaluating the management performance (Jones and Bulter 1992). Therefore, uncertainty is considered as a “powerful contextual variable that is at the foundation of contingency based research” (Chenhall 2007: p. 172).

Fourth, strategy and uncertainty are closely related (Chenhall 2006). Possibly, the most important new stream of literature in the contingency theory is that related to the role of strategy in designing PMS (Chenhall 2007). PMS endeavours to align strategy with operations by interpreting official goals into operative goals to be cascaded down through the organisation (Chenhall 2007). Besides, strategy is fairly different from other contingency factors as it is not a part of context; rather it is one means that can be used by managers to control the level of uncertainty (Fisher and Govindarajan 1993; Chenhall 2007). Further, strategy is one of the most important determinants of the level of CE (Covin and Slevin 1991; Zahra 1991).

3.1 Environmental uncertainty

3.1.1 *Environmental uncertainty and VBM*

The external environment is one of the early and important contextual factors that have been examined at the foundation of contingency-based research (Chenhall 2007; Abdel-Kader and Luther 2008). Different taxonomies are used in the literature to capture the multiple aspects of external environment (Chenhall 2007). For instance, Khandwalla (1977) uses turbulence, hostility, diversity, and complexity taxonomy. Other taxonomies include complexity and dynamism (Duncan 1972), ambiguity (Ouchi 1979), intensity of competition, dynamism, unpredictability of external environment (Gordon and Narayann 1984), and lack of information (Chenhall and Morris 1986). However, care should be exercised in interpreting the results of different studies that examine the effect of external environment on management accounting systems as different measures for uncertainty are used (Abdel-Kader and Luther 2008). For instance, Gordon and Narayann (1984) used competition, and the dynamism and unpredictability of the external environment to measure uncertainty. Further, Chenhall and Morris (1986) used the lack of information on environmental factors to measure the same construct.

Uncertainty, the most widely researched aspect of environment (Chenhall 2007), represents a situation where the organisation faces difficulties in planning the future as events cannot be identified or the impact of events on operations is unknown (Chenhall 2006). In MCSs research, uncertainty has been related to difficulties in making accurate predictions (Gul and Chia 1994), and evaluating performance as managers' performance depends on events over which they have little control (Chenhall 2006). Consequently, a high level of uncertainty makes performance evaluation more subjective (Govindarajan 1984); a non-accounting style rather than a budget- or profit-constrained style is more appropriate (Ross 1995). Therefore, the decision-makers are likely to seek external, non-financial and ex ante information (Gordon and Narayann 1984), and more sophisticated management accounting systems (MASs) (Abdel-Kader and Luther 2008). More sophisticated reports from

MAS can help to reduce uncertainty and improve managerial decision-making (Chong and Chong 1997).

In this regards the literature suggests that the VBM approach is one of the highly sophisticated MASs (Abdel-Kader and Luther 2008) and represents the fourth (latest) stage of management accounting evolution (Ittner and Larcker 2001). In addition, it has been argued that competitive environment is one of the important driving forces behind VBM implementation (Athanasakos 2007).

Therefore, VBM implementation is likely to be more appropriate when the level of uncertainty is relatively high, and a fit between VBM implementation and a high degree of uncertainty is likely to be associated with higher performance.

Proposition 1.1 *VBM implementation is positively associated with the level of environmental uncertainty.*

Proposition 1.2 *Organisational performance tends to be higher when VBM implementation is associated with high level of environmental uncertainty.*

3.1.2 Environmental uncertainty and CE

In CE research, the external environment has been suggested as an important determinant of entrepreneurial activities at organisational level (Covin and Slevin 1991) and intrapreneurship (entrepreneurship within existing companies) (Miller 1983; Covin and Slevin 1991).

The literature suggests that environmental uncertainty is positively associated with product innovation (Miller and Friesen 1982). Dynamism relates to the perceived instability and continuing changes in the company's markets (Zahra 1991; Antoncic and Hisrich 2001, 2004) or the rate of unpredictable change in a company's environment (Duncan 1972; Lumpkin and Dess 2001). Increased dynamism creates opportunities in the market and stimulates the pursuit of CE (Zahra 1991). Besides, companies respond to challenging conditions in dynamic environments through innovative behaviour, risk-taking, and proactiveness (Khandwalla 1987).

Based on previous results, CE is likely to be positively related to the level of environmental uncertainty. Consequently, a fit between CE and a high degree of uncertainty is likely to be associated with higher performance.

Proposition 1.3 *CE is positively associated with the level of environmental uncertainty.*

Proposition 1.4 *Organisational performance tends to be higher when CE is associated with high levels of environmental uncertainty.*

3.2 Strategy

3.2.1 Strategy and VBM

There has been a growing interest in studying the contingent relationship between strategy and MCS in general (Langfield-Smith 1997) and PMS specifically (Ittner

and Larcker 1997). For instance, some studies examined the effect of strategy on budgetary usage (Collins et al. 1997), budget emphasis (Van der Stede 2000), budgetary slack (Van der Stede 2000, 2001), structure, and PMS (Abernethy and Lillis 2001).

Different categorisations for strategy have been suggested to study this contingent relationship. For instance, Miles and Snow (1978) used the taxonomy of prospectors/analysers/defenders. Gupta and Govindarajan (1984) used build/hold/harvest taxonomy. Porter (1980) used product differentiation/cost leadership classification of strategy. However, it has been argued that these classifications are very similar and the prospectors/product differentiators/builders taxonomy can be used anonymously at one end of a continuum and defenders/cost leaders/harvesters at the other end (Abdel-Kader and Luther 2008).

Contingency-based studies suggest that prospectors/product differentiators/builders tend to create innovation and look for new product and market opportunities (Cadez and Guilding 2008), which is linked to outcome-oriented evaluation, flexible structures, lack of standardised procedures (Chenhall 2003, 2007), and more sophisticated MASs (Abdel-Kader and Luther 2008). Defenders/cost leaders/harvesters are less dynamic and more focused on efficiency as a key for success (Cadez and Guilding 2008), which is linked to centralised control systems, specialised and formalised work (Chenhall 2003, 2007), and less sophisticated MASs (Abdel-Kader and Luther 2008).

Therefore, strategies characterised by an entrepreneurial orientation (prospectors/product differentiators/builders) are likely to be more appropriate to VBM as a sophisticated MAS than conservative strategies (defenders/cost leaders/harvesters). A fit between VBM implementation and prospectors/product differentiators/builders strategies is likely to be associated with high performance.

Proposition 2.1 *VBM implementation is positively associated with prospectors/product differentiators/builders strategies and negatively associated with defenders/cost leaders/harvesters.*

Proposition 2.2 *Organisational performance tends to be higher when VBM implementation is associated with prospectors/product differentiators/builders.*

3.2.2 Strategy and CE

From the entrepreneurial perspective, strategy has been considered an important predictor of innovation decisions (Covin and Slevin 1991) and CE activities (Zahra 1991) as it provides a framework within which the company identifies possible means for achieving goals (Zahra 1993b). Accordingly, a fit between strategy and CE has been argued to be an important predictor of business success and improved performance (Miller 1986; Zahra 1991).

Dess et al. (1997) used two of the generic strategies proposed by Porter (1980), cost leadership and differentiation. Two distinct types of differentiation strategies were suggested: product innovation and marketing differentiation (Miller 1986). Differentiation through product innovation or pioneering (Miller 1992) involves creating and development of new products, up-to-date innovations, quality design,

and using new technologies (Miller 1988; Dess et al. 1997). Marketing differentiation strategy attempts to create a unique image for a product through extensive advertising, image marketing, and intensive marketing (Miller 1988; Dess et al. 1997). Accordingly, differentiation strategies in general seem to better fit in a more entrepreneurial context and the results of empirical studies support this argument (e.g. Dess et al. 1997; Chenhall 2007).

On the other hand, cost leadership strategy requires companies to focus more on cost control and efficiency to be the lowest cost producer in an industry, so that excess returns can be obtained even with low prices (Miller 1988). However, cost savings can be achieved in some situations by means of cutting innovation and advertising cost and offering cheap products to customers looking for cost savings rather than brand image (Dess et al. 1997). Therefore, it has been argued that cost leadership strategy is not positively associated with new product development (Zahra and Covin 1993) and higher performance (Dess et al. 1997). Interestingly, the results of the two empirical studies challenged this argument. These findings can be partly interpreted as competing on the basis of cost may necessitate proactively monitoring the environment, risk-taking, and innovation including the use of up-to-date technologies that lower costs and improve quality (Dess et al. 1997).

Based on previous results, CE is likely to be positively related to prospectors/product differentiators/builders strategies. Consequently, a fit between CE and prospectors/product differentiators/builders strategies is likely to be associated with higher performance.

Proposition 2.3 *CE is positively associated with prospectors/product differentiators/builders strategies and negatively associated with defenders/cost leaders/harvesters strategies.*

Proposition 2.4 *Organisational performance tends to be higher when CE is associated with prospectors/product differentiators/builders strategies.*

3.3 Size

3.3.1 Size and VBM

Size of organisation is likely to be an important factor in adopting economic value measures. The findings of contingency-based studies indicate that company size is positively related to accounting and control systems sophistication. For instance, Bruns and Waterhouse (1975), Merchant (1981, 1984), Ezzamel (1990), Libby and Waterhouse (1996), Haldma and Laats (2002), and Abdel-Kader and Luther (2008) suggest that as a company increases in size, the accounting and control systems (e.g. the budgetary control system) tend to be more sophisticated.

The VBM literature suggests that performance becomes more complicated when the company size is getting larger, which requires a more sophisticated PMS to provide information for decision-making and to determine shareholder wealth (Cooper and Petry 1994; Ryan and Trahan 1999). In addition, VBM implementation is time-consuming, requires enormous senior managerial commitment, and costly as most companies that adopt VBM employ consultants and invest heavily in

education, training that cover the majority of managers and employees (Boulos et al. 2001). Thus, implementing VBM requires significant resources which make it only affordable by large companies.

Accordingly, VBM implementation is likely to be associated with large size companies. A fit between VBM implementation and large size companies is likely to be associated with high performance.

Proposition 3.1 *VBM implementation is positively associated with large size companies.*

Proposition 3.2 *Organisational performance tends to be higher when VBM implementation is associated with large size companies.*

3.3.2 Size and CG

Company size has been related to the strength of CG structure and the level of compliance to CG codes. For instance, Gompers et al. (2003) concluded that there is a positive association between company size and CG index. Further, there are some evidences that company size has a positive significant influence on the relationship between CG and performance (Hanifa and Hudaib 2006).

The rationale behind the “comply or explain” approach for CG codes is that there is no one CG structure fits all (Arcot et al. 2010). For instance, the UK CG code allows smaller listed companies (below FTSE 350) not to comply with some provisions (FRC 2010). Compliance with some CG provisions (e.g. proportion of non-executive directors and independent non-executive directors) sometimes is costly and small companies cannot afford it (Arcot et al. 2010).

Accordingly, large size companies are likely to have a stronger CG structure and/or to show more compliance to CG codes. A fit between large size companies and strong CG structure is likely to be associated with high performance.

Proposition 3.3 *Strength of CG structure is positively associated with company size.*

Proposition 3.4 *Organisational performance tends to be higher when large size companies maintain a strong CG structure.*

3.3.3 Size and CE

Though company size is mostly used as a control variable (Rauch et al. 2009), there are some clues in the literature suggesting that it would affect the CE. For instance, Hitt et al. (1996) suggest that company size is negatively associated with internal innovation. Moreover, Covin and Covin (1990) suggest that competitive aggressiveness could be an effective strategic posture in a hostile environment for small companies with at least 30 employees. Similarly, Barringer and Bluedorn (1999) provide another evidence of negative association between company size and CE. Rauch et al. (2009) argue that smaller companies are more flexible, can quickly adapt to changes in environment to take new opportunities, and direct influence can be practised by top management.

Accordingly, CE is likely to be negatively related to company size. A fit between small size and CE is likely to be associated with high performance.

Proposition 3.5 *CE is negatively associated with company size.*

Proposition 3.6 *Organisational performance tends to be higher when CE is associated with smaller size companies.*

3.4 Agency conflicts

3.4.1 Agency conflicts and VBM

Agency conflicts arise from the misalignment between the interests of owners and managers of a company as a result of the separation between ownership and control (Jensen and Meckling 1976; Fama and Jensen 1983). Different sources of agency conflicts have been identified including moral hazard (Jensen and Meckling 1976), earning retention, risk aversion (Jensen 1986), and time horizon (Healy 1985). The literature suggests some variables can be used to proxy the magnitude of agency conflicts such as ownership structure (Lovata and Costigan 2002), company size (Dey 2008), and financial leverage (Hogan and Lewis 2005). The higher the agency conflicts the greater the demand for oversight and control mechanisms to align the conflicting interests (Dey 2008).

The literature suggests that VBM can be used as an effective tool to reduce the moral hazard problem, align the managers' and shareholders' interests (Stewart 1991; Lovata and Costigan 2002), and lead to the creation of shareholder value (Crowther 2003). VBM better aligns the interests of managers and shareholders through linking their compensations to shareholder value (Ryan and Trahan 2007) and aligning CG practices with the main objective of creating shareholder value (Armour and Mankins 2001).

The results of empirical studies support this notion. For instance, Mc Laren (2000) suggests that the main reason for implementing VBM in New Zealand companies was to align managerial and shareholder interests. Lovata and Costigan (2002) concludes that companies using EVA exhibit a higher percentage of institutional ownership and lower percentage of insider ownership (higher level of agency conflict) in comparison with non-adopter companies. Further, Hogan and Lewis (2005) argue that shareholders and/or boards of companies with high agency conflicts may pressure top management to adopt economic profit plans if they believe that the plans more effectively align the interests of managers and shareholders.

Accordingly, agency conflicts are likely to influence the decision of adopting VBM. In other words, it is expected that the higher the potential agency conflicts in a company the more likely this company is to use the VBM approach. In addition, a fit between VBM implementation and high level of agency conflicts is likely to be associated with high performance.

Proposition 4.1 *VBM implementation is positively associated with the level of agency conflicts.*

Proposition 4.2 *Organisational performance tends to be higher when VBM is associated with high agency conflicts.*

3.4.2 Agency conflicts and CG

Governance structure of a company comprises a number of mechanisms to minimise the agency conflicts, align the interests of owners and managers (Dey 2008; McKnight and Weir 2009), and create value (La Porta et al. 2000). The higher the agency conflict in a company, the greater the demand for governance mechanisms that can mitigate these conflicts (Dey 2008).

The literature suggests that the effectiveness of CG mechanisms differs from one context to another (Ting 2006). For instance, Mitton (2002) studied the CG mechanisms during the East Asian financial crisis in 1997–1998, and concluded that a strong CG structure becomes more important during crisis time. Similarly, Ting (2006) and Dey (2008) suggest that agency conflicts are important in explaining CG effectiveness. Further, agency conflicts vary between companies depending on the ability of managers to exercise their own preferences rather than value maximisation and the complexity of the operating environment (Jensen and Meckling 1976; Dey 2008). Thus, the governance structure required to tackle the agency conflicts varies across companies (Dey 2008). These results suggest that a contingency framework for CG mechanisms is needed to develop our understanding of the determinants of effective CG in different contexts.

Accordingly, agency conflicts are likely to be positively related to the strength of CG structure. A fit between CG structure and high level of agency conflicts is likely to be associated with high performance.

Proposition 4.3 *Strength of CG structure is positively associated with the level of agency conflicts.*

Proposition 4.4 *Organisational performance tends to be higher when CG mechanisms are associated with high agency conflicts.*

3.4.3 Agency conflicts and CE

From the agency theory perspective, the agency problem in the entrepreneurial context arises because “entrepreneurial behaviour, by definition, is action in the context of uncertainty so that it is impossible or prohibitively expensive to evaluate the effectiveness of agent’s behaviour” (Jones and Bulter 1992: p. 736). Further, agents (managers) are risk-averse (Jensen and Meckling 1976). So, agents do not have an incentive to perform entrepreneurially undertaking highly uncertain projects while they are rewarded only on the basis of salaries as the principals (shareholders) are the residual claimant (Jones and Bulter 1992). Therefore, the rewarding system is a central issue to stimulate managers towards the entrepreneurial behaviour (Jones and Bulter 1992).

Agency conflicts and information asymmetries between managers and shareholders cause agency costs (Jensen and Meckling 1976). Agency costs, in turn,

exhaust a company's resources and may constrain innovation and CE (Miller 2011) especially when the board is conservative (Morck et al. 2005).

Accordingly, CE is likely to be negatively related to agency conflicts and a fit between CE and low level of agency conflicts is likely to be associated with high performance.

Proposition 4.5 *CE is negatively associated with the level of agency conflicts.*

Proposition 4.6 *Organisational performance tends to be higher when CE is associated with lower levels of agency conflicts.*

3.5 VBM, CG, and CE

3.5.1 VBM and CG

CG research and practice have been dominated by agency theory (Clarke 2005; Filatotchev and Boyd 2009). However, agency theory has been criticised for its overemphasis on shareholder ignoring the interests of other stakeholders (Judge 2009) and the adoption of shareholder value as the reference model (Aglietta and Rebiérioux 2005). Thus, it can lead to a myopic market model for CG, similar to the Anglo-American model that focuses on short-term performance at the expense of long-term value and competitiveness (Letza et al. 2008).

However, the popularity of agency theory in CG can be attributed to its simplicity as it reduces large corporations to the two most powerful players, shareholders and managers (Daily et al. 2003; Clarke 2005). Besides, there is a widespread belief that humans are self-interested and unwilling to sacrifice their personal interests for the interests of others (Daily et al. 2003).

From the agency perspective, at least three methods can be used to increase the likelihood that management acts in the interests of shareholders: bonding managers contractually, monitoring them, and/or providing them with incentives that align their interests (Denis 2001). However, complete contingent contracts in an uncertain world are infeasible (Shleifer and Vishny 1997); monitoring solutions are costly and can be practically impossible (Denis 2001); and long term incentive contracts cannot alone align the conflicting interests (Healy 1985; Shleifer and Vishny 1997; Dey 2008).

VBM provides an integrated management strategy and financial control system that can be used to mitigate agency conflicts and create shareholder value through providing a set of decision-making tools (metrics), which can be used to measure and reward management performance (Ryan and Trahan 2007). However, there is some evidence that incentive contracts alone may not be enough to tackle agency problems (Healy 1985; Shleifer and Vishny 1997; Dey 2008) even if compensations are based on VBM metrics. In this regard, results of empirical studies are mixed and inconclusive (Lueg and Schaffer 2010; Rapp et al. 2011).

A set of governance mechanisms are proposed to be used to mitigate agency conflicts, align the interests of shareholders and managers (Dey 2008; McKnight and Weir 2009), protect shareholder rights (La Porta et al. 2000), and improve performance (Larcker et al. 2007). The literature suggests some complementary

tools to the incentive contracts such as increasing management ownership (Audretsch et al. 2009). In that regard, VBM and CG practices have common objectives including mitigating agency conflicts and creating shareholder value. Thus, VBM can be seen as a form of CG (Lander and Reinstein 2005).

The advocates of VBM assert that VBM is a holistic management approach that comprises a set of CG mechanisms aligned with the corporate mission, strategy, management process, PMS, and reward system (Arnold 2000; Armour and Mankins 2001). Thus, VBM as a holistic management approach is likely to stimulate strengthening of the CG structure to be aligned with the objective of shareholder maximisation. The results of a recent study by Larcker et al. (2011) support this argument, and it concludes that value-maximising contracts determine the observed governance choices of a company in the USA.

Despite the importance of linking VBM implementation to CG mechanisms, very few studies have examined this relationship. For instance, in a survey of all listed companies in Japan, Morisawa and Kurosaki (2002) concluded that integrating CG into VBM system to be aligned with management orientation and the decision-making process is one of the key success factors in increasing corporate value. There was a significant difference between the views of VBM adopters and non-adopters with regard to CG (Morisawa and Kurosaki 2002). In addition, a cross-sectional study by El Mir and Seboui (2008) concluded that while EVA as a performance measure does not outperform other accounting measures in explaining the created shareholder value, the convergence or the divergence between EVA and the created shareholder value are largely explained by CG practices.

Based on this a priori reasoning, it is proposed that companies that adopt the VBM approach are likely to have a strong CG structure and to exercise more compliance to CG codes to ensure accountability to shareholders and to protect their rights. Accordingly, a fit between VBM and strong CG structure is likely to be associated with greater performance.

Proposition 5.1 *CG structure tends to be stronger in VBM adopting companies compared with non-adopting companies.*

Proposition 5.2 *CG structure mediates the positive relationship between VBM implementation and organisational performance.*

3.5.2 VBM and CE

The agency theory focuses on the conformance dimension assuming that the main role of the board of directors is to monitor and control management behaviour to ensure that it acts in the interest of shareholders (Cornforth 2004). From the stewardship theory perspective, the main role of the board of directors “is not to ensure managerial compliance with shareholders/members interests, but to improve organisational performance. The role of the board is primarily strategic, to work with management to improve strategy and add value to top decisions” (Cornforth 2004: p. 15).

According to the EG frameworks, good CG practices (conformance) is a necessary, but not sufficient, cornerstone for business success (Connell 2004). The

results of empirical studies with regard to the relationship between CG and performance are not clear (Larcker et al. 2007; Bebchuk and Weisbach 2010). However, the performance dimension is as important as conformance to the business success and value creation (Connell 2004) and is being operationalised in this model using CE.

The literature suggests that PMSs such as balance scorecard and EVA (Bhimani and Soonawalla 2005) can be used to address the oversight gap in the performance dimension. Arguably, strategic PMSs, including balanced scorecard and VBM, better align PMS with organisational objectives (Ittner et al. 2003). Busco et al. (2006) provide empirical evidence that a balanced scorecard is an effective tool in addressing the oversight gap in performance and integrating governance. Similarly, this study suggests that the VBM approach can play the same role. Advocates of VBM argue that VBM as a PMS can better align the VBM metrics and strategic objectives (creating shareholder value) through identifying internal objectives, strategies, value drivers, and action plans that lead shareholder value creation (Copeland et al. 2000; Ittner et al. 2003). In addition, the VBM approach ties compensation to shareholder return performance (Rappaport 1986) to motivate and reward the shareholder value creation behaviour throughout the organisation (Slater and Olson 1996).

On the other hand, CE has been shown as an organisational process that is central to the value-creation process (Jones and Bulter 1992). CE “can enhance shareholders’ value by creating a work environment that supports individual and corporate growth, giving employees an opportunity to use their creative skills, quickening a company’s response to the market, and creating an organisational culture that fosters cross-functional collaboration” (Zahra 1996: p. 1715). Therefore, to achieve the objective of creating shareholder value, VBM adopters are expected to be more engaged in innovation, renewal and venturing necessary for value creation. To the best of our knowledge, the relationship between VBM and CE has not been investigated in the literature.

Based on this a priori reasoning, it is proposed that companies that adopt VBM approach are likely to be more engaged in CE to achieve the ultimate objective of creating shareholder value. A fit between VBM and CE is likely to be associated with greater performance.

Proposition 5.3 *CE tends to be higher in VBM adopting companies compared with non-adopting companies.*

Proposition 5.4 *CE mediates the positive relationship between VBM and organisational performance.*

3.5.3 CG and CE

Understanding the link between CE and CG is important because strategic competitive advantage may not be created where CG mechanisms do not encourage and monitor management to undertake the necessary actions to recognise opportunities (Phan et al. 2009). Directors can play an important role in identifying opportunities for growth by giving more attention to CE and innovation activity that

allow the company to sustain its competitive advantage (Zahra et al. 2009). Further, boards can encourage wealth-creating CE by providing resources and political support (Huse 2007). Though a CG system could have a significant influence on CE, surprisingly the research on the structures and routines necessary for CE has been neglected to a large extent (Phan et al. 2009).

The results of a few studies such as Zahra (1996) suggest that some CG mechanisms such as high ratio of outside directors in board and short-term institutional ownership have a negative impact on CE. Similarly, O'Sullivan (2000) concluded that the market for corporate control negatively affects innovation. However, other mechanisms such as stock ownership by outside directors and long-term institutional ownership are positively associated with CE (Zahra 1996). Meanwhile, the outside directors have a less negative impact on CE when they own stock in the company (Zahra 1996). In another study, Zahra et al. (2000) concluded that in medium-size companies, CE is positively associated with separating the roles of chair and CEO, medium size of board, and percentage of stock owned by both executives and outsiders in their companies. The results are mixed with regard to the relationship between CE from the one hand and the ratio of outside directors and institutional relationships on the other hand (Zahra et al. 2000).

In summary, CG mechanisms are influencing CE in different ways. Some of these mechanisms (e.g. outside directors) negatively affect CE, and others (e.g. stock ownership by outside directors) have a positive impact on CE and somewhat mitigate the negative impact of other mechanisms (Zahra 1996).

Proposition 5.5 *CE is negatively associated with some CG mechanisms such as (a) outside directors in the board of directors (b) short-term institutional ownership (c) market for corporate control.*

Proposition 5.6 *CE is positively associated with some CG mechanisms such as (a) separating the roles of CEO and chairman (b) medium size of board of directors (c) executive directors' stock ownership (d) outside directors' stock ownership.*

Proposition 5.7 *CG mechanisms that are positively associated with CE are likely to mitigate the negative impact of other CG mechanisms that are positively associated with CE.*

4 Conclusion

This study sets out to address the tension between conformance and performance in the governance context through developing a theoretical contingency model based on the EG framework. The theoretical model investigates the role of VBM in achieving the objectives of EG through keeping balance between conformance and performance.

VBM has the potential to achieve the EG objectives in different ways. First, VBM as a PMS aligns the interests of managers and shareholders, and mitigates agency conflicts through monitoring performance and using incentive contracts based on VBM metrics. This can ensure accountability of management to

shareholders and contribute to the conformance dimension. Meanwhile, incentive contracts motivate managers to create shareholder value, which contribute to the performance dimension too. Second, VBM as a holistic management approach stimulates adopting a set of CG mechanisms that are aligned with the objective of maximising shareholder value, which contribute to the conformance dimension. Third: VBM stimulates entrepreneurial orientation including innovation, proactiveness, and risk-taking to create shareholder value.

Drawing on the premise of the contingency theory, the study theoretically investigates the association between four contingency factors (environmental uncertainty, strategy, size, and agency conflicts) on the one hand and VBM, CG, and CE on the other hand. The developed model suggests that a fit between these contingency factors and VBM, CG, and CE has the potential to strengthen CG structure, improve CE and achieve a high level of organisational performance. Unlike other EG frameworks, this study used the contingency theory lens to develop the current theoretical model, operationalised the conformance and performance dimensions using CG and CE, suggested the VBM approach to achieve EG objectives, and developed testable propositions using four contingency factors with possible influence on VBM, CG, and CE.

To achieve the first two objectives of this study, the propositions suggest that VBM implementation is likely to be associated with high levels of uncertainty, prospectors/product differentiators/builders' strategies, large size of companies, and high agency conflicts. Similarly, strong CG structure is likely to be associated with large size of companies and high agency conflicts. CE is likely to be associated with high level of uncertainty, prospectors/product differentiators/builders' strategies, small size of companies, and low agency conflicts. Moreover, the propositions suggest that fit between these contingency factors, VBM, CG, and CE is likely to be associated with organisational performance.

To achieve the third and the fourth objectives of this study, the propositions suggest that both VBM and CG share similar antecedents (e.g. large size companies and high agency conflicts), which are different from the antecedents to CE (e.g. small size companies and low agency conflicts). Meanwhile, CE shares other antecedents with VBM such as high level of uncertainty and prospectors/product differentiators/builders strategies. Further, there is no common antecedent between CE and CG.

Though the propositions were not empirically examined in this study, the theoretical analysis of these propositions suggests that VBM adopters are likely to have a strong CG structure as the context of large size companies with high agency conflicts fits these practices. However, this context is unlikely to fit CE, which requires different antecedents. Meanwhile, VBM implementation is likely to be associated with uncertainty and differentiation strategies, the context which fits CE. Accordingly, it is not clear whether VBM implementation is likely to be associated with CE or not due to the lack of matching between their antecedents. Given the lack of common antecedents between CE and CG, which supports the notion of tension between the conformance and performance dimensions of EG, VBM implementation is unlikely to be associated with CE.

The analysis also implies that the governance context that focuses on control and accountability may not well fit the entrepreneurial behaviour necessary for value creation. The similarity among the antecedents to both VBM and CG from the one hand, and the less similarity among the antecedents to both VBM and CE on the other hand make the ability of VBM to balance conformance and performance questionable. While VBM is likely to be associated with CG to mitigate the agency conflicts, it is less likely to be associated with CE. Accordingly, more emphasis is placed on the control and accountability on the expense of entrepreneurial activities needed for value creation. This implies that VBM tends to focus more on conformance than performance, which raises concerns over the ability of VBM to achieve the objectives of EG.

This study contributes to the literature at different levels. First, the study attempts to bridge the gap among different disciplines including management accounting, CG, and entrepreneurship. Second, combining both the contingency theory and the agency theory lenses has contributed to the development of a comprehensive conceptual model for EG. Third, the conceptual model links a performance management system, i.e. VBM, to CG and CE, the area which is under-researched in the literature. Fourth, the developed conceptual model provides insights into the potential relationships among VBM, CG and CE as important predictors of organisational performance from the contingency theory perspective. Fifth, the model supports the argument of the likely tension between conformance and performance as their antecedents are different. Sixth, the model suggests that VBM is unlikely to achieve the objectives of EG as a result of the likely overemphasis on conformance at the expense of performance, which can contribute to resolving the mixed results in VBM literature. Seventh, the model suggests that organisational performance is the final outcome of interaction among many practices that may complement or conflict with each other. Studying the effect of each practice individually on organisational performance may lead to drawing misleading conclusions.

However, one important limitation of this study is the lack of empirical evidence that supports the study propositions. Therefore, more empirical evidences are much needed in this area of research using different contexts and different research methods. Further, more studies are needed in general in this area of research to explore the possible relationships between the characteristics of PMS, CG, and CE. Exploring the conflicting/complementary relationships between compliance to CG codes, CE, and organisational performance is rather important to decide the appropriate level of CG regulation that ensures accountability without sacrificing enterprise. More specifically, more empirical evidences in different contexts using different research methods are much needed in this area of research.

References

- Abdel-Kader, M., & Luther, R. (2008). The impact of firm characteristics on management accounting practices: A UK-based empirical analysis. *British Accounting Review*, 40, 2–27.
- Abernethy, M., & Lillis, A. (2001). Interdependency in organisation design: A test in hospitals. *Journal of Management Accounting Research*, 13, 107–129.

- Aggarwal, R. (2001). Using economic profit to assess performance: A metric for modern firms. *Business Horizons*, 44(1), 55–60.
- Aglietta, M., & Reberlioux, A. (2005). *Corporate governance adrift: A critique of shareholder value*. Cheltenham, UK: Edward Elgar.
- Anderson, S. W., & Young, S. M. (1999). The impact of contextual and process factors on the evaluation of activity-based costing systems. *Accounting, Organizations and Society*, 24(7), 525–559.
- Ang, J., Cole, R., & Lin, J. (1999). Agency costs and ownership structure. *Journal of Finance*, 55, 81–106.
- Antonic, B., & Hisrich, R. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing*, 16, 495–527.
- Antonic, B., & Hisrich, R. (2004). Corporate entrepreneurship contingencies and organizational wealth creation. *The Journal of Management Development*, 23(5/6), 518–550.
- Antonic, B., & Prodanb, I. (2008). Alliances, corporate technological entrepreneurship and firm performance: Testing a model on manufacturing firms. *Technovation*, 28(5), 257–265.
- Arcot, S., Bruno, V., & Faure-Grimaudc, A. (2010). Corporate governance in the UK: Is the comply or explain approach working? *International Review of Law and Economics*, 30(2), 193–201.
- Armour, E., & Mankins, M. (2001). Back to the future. *Journal of Business Strategy*, 22(4), 22–27.
- Arnold, G. (2000). Tracing the development of value-based management. In G. Arnold & M. Davis (Eds.), *Value-based management: Context and application* (pp. 7–35). Chichester: Wiley.
- Arnold, G. (2008). *Corporate financial management*. Essex: FT Prentice Hall.
- Athanassakos, G. (2007). Value-based management, EVA and stock price performance in Canada. *Management Decision*, 45(9), 1379–1411.
- Audretsch, D. B., Lehmann, E. E., & Plummer, L. A. (2009). Agency and governance in strategic entrepreneurship. *Entrepreneurship Theory and Practice*, 33(1), 149–166.
- Avlonitisa, G., & Salavoub, H. E. (2007). Entrepreneurial orientation of SMEs, product innovativeness, and performance. *Journal of Business Research*, 60(5), 566–575.
- Bannister, R., & Jesuthasan, R. (1997). Theory in action: Is your company ready for value-based management? *Journal of Business Strategy*, 18(2), 12–15.
- Bao, B., & Bao, D. (1998). Usefulness of value added and abnormal economic earnings: An empirical examination. *Journal of Business Finance & Accounting*, 25(1/2), 251–264.
- Barringer, B. R., & Bluedorn, A. C. (1999). The relationship between corporate entrepreneurship and strategic management. *Strategic Management Journal*, 20, 421–444.
- Bebchuk, L. A., & Weisbach, M. S. (2010). The state of corporate governance research. *Review of Financial Studies*, 23(3), 939–961.
- Bhimani, A., & Soonawalla, K. (2005). From conformance to performance: The corporate responsibilities continuum. *Journal of Accounting and Public Policy*, 24(3), 165–174.
- Biddle, G., Bowen, R., & Wallace, J. (1997). Does EVAs beat earnings? Evidence on the association with stock returns and firm values. *Journal of Accounting and Economics*, 24, 301–336.
- Boulos, F., Haspeslagh, P., & Noda, T. (2001). *Getting the value out of valuebased management: Findings from a Global Survey on Best Practices*. INSEAD: Harvard Business School Publishing Corporation.
- Bromwich, M., & Walker, M. (1998). Residual income past and future. *Management Accounting Research*, 9, 391–419.
- Bruns, W. J., & Waterhouse, J. H. (1975). Budgetary control and organization structure. *Journal of Accounting and Organisational Structure*, 13(2), 177–203.
- Busco, C., Frigo, M., Giovannoni, E., & Riccaboni, A. (2005). Beyond compliance: Why integrated governance matters today? *Strategic Finance*, 87(2), 35–43.
- Busco, C., Giovannoni, E., Riccaboni, A., Frigo, M., & Scapens, R. (2006). Towards integrated governance: The role of performance measurement systems. In M. Epstein (Ed.), *Performance measurement and management control: Improving organisations and society* (pp. 159–186). Oxford: Elsevier.
- Cadbury, A. (1992). *Report of the committee on the financial aspects of corporate governance*. London: Financial Reporting Council.
- Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, Organizations and Society*, 33(7–8), 836–863.
- Chapman, C. (1997). Reflections on contingent view of accounting. *Accounting, Organizations and Society*, 22(2), 189–205.

- Charkham, J. (1995). *Keeping good company: A study of corporate governance in five countries*. Oxford: Oxford University press.
- Charkham, J. (1998). Corporate governance overcoded? Has Hampel meant progress? *European Business Journal*, 10(4), 179–183.
- Chen, S., & Dodd, J. (1997). Economic value added (EVA): An empirical examination of a new corporate performance measure. *Journal of Managerial Issues*, 9, 319–333.
- Chenhall, R. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organization and Society*, 28, 127–168.
- Chenhall, R. (2006). The contingent design of performance measures. In A. Bhimani (Ed.), *Contemporary issues in management accounting* (pp. 92–116). Oxford: Oxford University Press.
- Chenhall, R. (2007). Theorizing contingencies in management control systems research. In C. Chapman, A. Hopwood, & M. Shields (Eds.), *Handbook of management accounting research* (pp. 163–205). Amsterdam: Elsevier.
- Chenhall, R., & Morris, D. (1986). The impact of structure, environment and interdependencies on the perceived usefulness of management accounting systems. *Accounting Review*, 61, 16–35.
- Chong, V., & Chong, K. (1997). Strategic choices, environmental uncertainty and SBU performance: A note on the intervening role of management accounting systems. *Accounting and Business Research*, 27(4), 268–276.
- Clarke, T. (1998). The contribution of non-executive directors to the effectiveness of corporate governance. *Career Development International*, 3(3), 118–124.
- Clarke, T. (2005). Accounting for Enron: Shareholder value and stakeholder interests. *Corporate Governance: An International Review*, 13(5), 598–612.
- Collins, F., Holzmann, O., & Mendoza, R. (1997). Strategy, budgeting and crisis in Latin America. *Accounting, Organisation and Society*, 22, 669–689.
- Connell, B. (2004). *Enterprise governance: Getting the balance right*. London: CIMA/IFAC.
- Cooper, S., & Crowther, D. (2008). The adoption of value-based management in large UK companies: A case for diffusion theory. *Journal of Applied Accounting Research*, 9(3), 148–167.
- Cooper, D., & Petry, G. (1994). Corporate performance and adherence to shareholder wealth-maximizing principles. *Financial Management*, 23(1), 71–78.
- Cooper, A., Markman, G., & Niss, G. (2000). The evolution of the field of entrepreneurship. In G. Meyer & K. Heppard (Eds.), *Entrepreneurship as strategy* (pp. 115–133). Thousand Oaks, CA: Sage.
- Copeland, T., Koller, T., & Murrin, J. (2000). *Valuation: Measuring and managing the value of companies*. New York: Wiley.
- Cornforth, C. (2004). The governance of cooperatives and mutual associations: A paradox perspective. *Annals of Public and Cooperative Economics*, 75(1), 11–23.
- Covin, J., & Covin, T. (1990). Competitive aggressiveness, environmental context, and small firm performance. *Entrepreneurship Theory and Practice*, 14(4), 35–50.
- Covin, J., & Slevin, D. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75–87.
- Covin, J., & Slevin, D. (1991). A conceptual model of entrepreneurship as a firm behavior. *Entrepreneurship Theory and Practice*, 16(1), 7–25.
- Covin, J., Slevin, D., & Schultz, R. (1994). Implementing strategic missions: Effective strategic, structural and tactical choices. *Journal of Management Studies*, 31(4), 481–505.
- Crowther, D. (2003). How important is customer satisfaction for long term shareholder value? *Accountancy Business and the Public Interest*, 2(1), 40–51.
- Daily, C. M., Dalton, D. R., & Cannella, A. J. (2003). Corporate governance: Decades of dialogue and data. *Academy of Management Review*, 28(3), 371–382.
- Davis, S., & Albright, T. (2004). An investigation of the effect of balanced scorecard implementation on financial performance. *Management Accounting Research*, 5(2), 135–153.
- Denis, D. K. (2001). Twenty-five years of corporate governance research and counting. *Review of Financial Economics*, 10(3), 191–212.
- Dess, G., Lumpkin, G., & Covin, J. (1997). Entrepreneurial strategy making and firm performance: Tests of contingencies and configurational models. *Strategic Management Journal*, 18(9), 677–695.
- Dey, A. (2008). Corporate governance and agency conflicts. *Journal of Accounting Research*, 46(5), 1143–1181.
- Dodd, J., & Chen, S. (1996). EVA: A new panacea? *Business and Economic Review*, 42(4), 26–28.

- Duncan, R. (1972). Characteristics of organizational environments and perceived environmental uncertainty. *Administrative Science Quarterly*, 17(3), 313–327.
- El Mir, A., & Seboui, S. (2008). Corporate governance and the relationship between EVA and created shareholder value. *Corporate Governance*, 8(1), 46–58.
- Emmanuel, C., Otley, D., & Merchant, K. (1990). *Accounting for Management Control*. London: Chapman & Hall.
- Emsley, D. (2000). Variance analysis and performance: Two empirical studies. *Accounting, Organizations and Society*, 1, 33–47.
- Ettlie, J. E. (1983). Organizational policy and innovation among suppliers to the food processing sector. *The Academy of Management Journal*, 26(1), 27–44.
- Ezzamel, M. (1990). The impact of environmental uncertainty, managerial autonomy and size on budget characteristics. *Management Accounting Research*, 1, 181–197.
- Fahi, M., Roche, J., & Weiner, A. (2005). *Beyond governance, creating corporate value through performance, conformance and responsibility*. New York, NY: Wiley.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301–325.
- Filatotchev, I., & Boyd, K. B. (2009). Taking stock of corporate governance research while looking to the future. *Corporate Governance: An International Review*, 17(3), 257–265.
- Filatotchev, I., & Wright, K. (2006). The life cycle of corporate governance. *Journal of Evolutionary Economics*, 16(3), 337–340.
- Fisher, J. (1995). Contingency-based research on management control systems: Categorization by level of complexity. *Journal of accounting literature*, 14, 24–53.
- Fisher, J., & Govindarajan, V. (1993). Incentive compensation design, strategic business unit mission, and competitive strategy. *Journal of Management Accounting Research*, 5, 129–144.
- Francis, G., & Minchington, C. (2002). Regulating shareholder value: A case study of the introduction of value based measures in a water company. *British Journal of Management*, 13, 233–247.
- FRC. (2010). *The UK corporate governance code*. London: Financial Reporting Council.
- Gerdin, J., & Greve, J. (2004). Forms of contingency fit in management accounting research: A critical review. *Accounting, Organization and Society*, 29, 303–326.
- Gillian, L. (2005). *The CIMA strategic scorecard*. London: CIMA.
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics*, 118, 107–155.
- Gordon, L., & Miller, D. (1976). A contingency framework for the design of accounting information systems. *Accounting, Organizations and Society*, 1(1), 59–70.
- Gordon, L., & Narayann, V. K. (1984). Management accounting systems, perceived environmental uncertainty and organizational structure: An empirical investigation. *Accounting, Organizations and Society*, 9(1), 33–47.
- Gosseline, M. (1997). The effects of strategy and organizational structure on the adoption and implementation of activity-based costing. *Accounting, Organizations and Society*, 22(2), 105–122.
- Govindarajan, V. (1984). Appropriateness of accounting data in performance evaluation: An empirical examination of environmental uncertainty as an intervening variable. *Accounting, Organizations and Society*, 9(2), 125–135.
- Grant, J. L. (1996). Foundations of EVA for investment managers. *The Journal of Portfolio Management*, 23(1), 41–48.
- Gul, F., & Chia, Y. (1994). The effects of management accounting systems, perceived environmental uncertainty and decentralization on managerial performance: A test of a three-way interaction. *Accounting, Organizations and Society*, 19(4/5), 413–426.
- Gupta, A., & Govindarajan, V. (1984). Build, hold, harvest: Converting strategic intentions into reality. *The Journal of Business Strategy*, 4(3), 34–47.
- Haldma, T., & Laats, K. (2002). Contingencies influencing the management accounting practices of Estonian manufacturing companies. *Management Accounting Research*, 13(4), 379–400.
- Hampel Report. (1998). *The final report*. London: The Committee on Corporate Governance and Gee Professional Publishing.
- Hanifa, R., & Hudaib, M. (2006). Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance & Accounting*, 33(7/8), 1034–1062.
- Haspeslagh, P., Noda, T., & Boulos, F. (2001). Managing for value: It's not just about the numbers. *Harvard Business Review*, 79(7), 64–73.

- Healy, P. M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, 7(1–3), 85–107.
- Hitt, M., Hoskisson, R. E., Johnson, R. A., & Moesel, D. D. (1996). The market for corporate control and firm innovation. *Academy of Management Journal*, 39(5), 1084–1119.
- Hogan, C., & Lewis, C. M. (2005). Long-run investment decisions, operating performance and shareholder value creation of firms adopting compensation plans based on economic profits. *Journal of Financial and Quantitative Analysis*, 27, 261–284.
- Hoque, Z., & James, W. (2000). Linking balanced-scorecard measures to size and market factors: Impact on organizational performance. *Journal of Management Accounting Research*, 12, 1–17.
- Hult, G. T., Snow, C. C., & Kandemir, D. (2003). The role of entrepreneurship in building cultural competitiveness in different organizational types. *Journal of Management*, 29(3), 401–426.
- Huse, M. (2007). *Boards, governance and value creation: The human side of corporate governance*. Cambridge: University Press.
- International Federation of Accountants (IFAC). (1998). *International management accounting concepts*. New York: IFAC.
- Ireland, R., Hitt, M., Camp, S., & Sexton, D. (2001). Integrating entrepreneurship and strategic management actions to create firm wealth. *Academy of Management Executives*, 15(1), 49–63.
- Ireland, R., Hitt, M., & Sirmon, D. (2003). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, 29(6), 963–989.
- Ittner, C., & Larcker, D. (1997). Quality strategy, strategic control systems, and organizational performance. *Accounting, Organizations and Society*, 22(3/4), 295–314.
- Ittner, C., & Larcker, D. (1998). Innovations in performance measurement: Trends and research implications. *Journal of Management Accounting Research*, 10, 205–238.
- Ittner, C., & Larcker, D. (2001). Assessing empirical research in managerial accounting: A value-based management perspective. *Journal of Accounting and Economics*, 32, 349–410.
- Ittner, C. D., Larcker, D. F., & Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society*, 28(7/8), 715–741.
- Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review*, 76(2), 323–329.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3, 305–360.
- Jones, G. R., & Bulter, J. E. (1992). Managing internal corporate entrepreneurship: An agency theory perspective. *Journal of Management*, 18(4), 1992.
- Judge, W. Q. (2009). Editorial: Toward a global theory of corporate. *Corporate Governance: An International Review*, 17, iii–iv.
- Keasey, K., & Wright, M. (1993). Issues in corporate accountability and governance. *Accounting and Business Research*, 23(1), 291–303.
- Khandwalla, P. (1977). *The design of organizations*. New York: Harcourt Brace Jovanovich.
- Khandwalla, P. (1987). Generators of PI management: Some Indian evidence. *Organisation Studies*, 8(1), 39–59.
- Kovacevic, S. (2009). Disclosed: An exploration of board remuneration committee challenges. *Asia Pacific Journal of Human Resources*, 47(2), 201–218.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58, 3–27.
- Lander, G. H., & Reinstein, A. (2005). Corporate governance and economic value alignment. *International Advances in Economic Research*, 11, 433–447.
- Langfield-Smith, K. (1997). Management control systems and strategy: A critical review. *Accounting, Organizations and Society*, 22, 207–232.
- Larcker, D., Richardson, S., & Tuna, I. (2007). Corporate governance, accounting outcomes, and organizational performance. *The Accounting Review*, 82(4), 963–1008.
- Larcker, D., Ormazabal, G., & Taylor, D. (2011). The market reaction to corporate governance regulation. *Journal of Financial Economics*, 101(2), 431–448.
- Lehn, K., & Makhija, A. (1997). EVA, accounting profits, and CEO turnover: An empirical examination, 1985–1994. *Journal of Applied Corporate Finance*, 10(2), 90–97.
- Letza, S., Kirkbride, J., Sun, X., & Smallman, C. (2008). Corporate governance theorising: Limits, critics and alternatives. *International Journal of Law and Management*, 50(1), 17–32.
- Libby, T., & Waterhouse, J. H. (1996). Predicting change in management accounting systems. *Journal of Management Accounting Research*, 8, 137–150.

- Lovata, L., & Costigan, M. (2002). Empirical analysis of adaptors of economic value added. *Management Accounting Research*, 13(2), 215–228.
- Lueg, R., & Schaffer, U. (2010). Assessing empirical research on value-based management: Guidelines for improved hypothesis testing. *Journal für Betriebswirtschaft*, 60(1), 1–47.
- Lumpkin, G., & Dess, G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172.
- Lumpkin, G., & Dess, G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16, 429–451.
- Lumpkin, G., Coglier, C., & Schneider, D. (2009). Understanding and measuring autonomy: An entrepreneurial perspective. *Entrepreneurship Theory and Practice*, 33(1), 47–69.
- Mc Laren, J. (2000). EVA for planning and control: Some preliminary evidence from New-Zealand. In BAA annual conference (p. 32). Exeter: BAA.
- McKnight, P. J., & Weir, C. (2009). Agency costs, corporate governance mechanisms and ownership structure in large UK publicly quoted companies: A panel data analysis. *The Quarterly Review of Economics and Finance*, 49(2), 139–158.
- Merchant, K. (1981). The design of the corporate budgeting system: Influences on managerial behaviour and performance. *The Accounting Review*, 4, 813–829.
- Merchant, K. (1984). Influences on departmental budgeting: An empirical examination of a contingency model. *Accounting, Organizations and Society*, 9(4), 291–307.
- Miles, M., & Covin, M. (2002). Exploring the practice of corporate venturing: Some common forms and their organizational implications. *Entrepreneurship: Theory and Practice*, 26(3), 21–40.
- Miles, R. W., & Snow, C. (1978). *Organizational strategy, structure and process*. New York: McGraw Hill.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29, 770–791.
- Miller, D. (1986). Configurations of strategy and structure: Towards a synthesis. *Strategic Management Journal*, 7(3), 233–249.
- Miller, D. (1988). Relating Porter's business strategies to environmental and structure: Analysis and performance implications. *Academy of Management Journal*, 31, 280–308.
- Miller, D. (1992). Generic strategies: Classification, combination and context. In P. Shrivastava, A. Huff, & J. Duttons (Eds.), *Advances in strategic management* (pp. 391–408). Greenwich, CT: JAI Press.
- Miller, D. (2011). Miller (1983) revisited: A reflection on EO research and some suggestions for future. *Entrepreneurship Theory and Practice*, 35(5), 873–894.
- Miller, D., & Friesen, P. H. (1978). Archetypes of strategy formulation. *Management Science*, 24(9), 921–933.
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3(1), 1–25.
- Mills, R., & Weinstein, B. (2000). Beyond shareholder value: Reconciling the shareholder and stakeholder perspectives. *Journal of General Management*, 25(3), 79–93.
- Mitton, T. (2002). A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis. *Journal of Financial Economics*, 58, 3–27.
- Morck, R., Wolfenzon, D., & Yeung, B. (2005). Corporate governance, economic entrenchment, and growth. *Journal of Economic Literature*, 43(3), 655–720.
- Morisawa, T., & Kurosaki, H. (2002). *The current state of value-based management in Japan and the road map of success*. Tokyo: Nomura Research Institute.
- Moxey, P., & Berendt, A. (2008). *Corporate governance and credit crunch*. London: ACCA.
- O'Sullivan, M. (2000). Corporate governance and globalisation. *The Annals of the American Academy of Political and Social Science*, 570(1), 153–172.
- Otley, D. (1980). The contingency theory of management accounting: Achievement and prognosis. *Accounting, Organizations and Society*, 5(4), 413–428.
- Ouchi, W. (1979). A conceptual framework for the design of organizational control mechanisms. *Management Science*, 25(9), 833–848.
- Phan, P. H., Wright, M., Ucbasaran, D., & Tan, W. L. (2009). Corporate entrepreneurship: Current research and future directions. *Journal of Business Venturing, Special Issue Corporate Entrepreneurship*, 24(3), 197–205.
- Porter, M. (1980). *Competitive strategy*. New York, NY: The Free Press.
- Rappaport, A. (1986). *Creating shareholder value*. New York: The Free Press.

- Rapp, M., Schellong, D., Schmidt, M., & Wolff, M. (2011). Considering the shareholder perspective: Value-based management systems and stock market performance. *Review of Managerial Science*, 5(2–3), 171–194.
- Rauch, A., Wiklund, J., Lumpkin, G., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship, Theory and Practice*, 33(3), 761–787.
- Ross, A. (1995). Job related tension, budget emphasis and uncertainty. *Management Accounting Research*, 6, 1–11.
- Ryan, H., & Trahan, E. (1999). The utilization of value-based management: An empirical analysis. *Financial Practice & Education*, 9(1), 46–58.
- Ryan, H., & Trahan, E. (2007). Corporate financial control mechanisms and firm performance: The case of value-based management systems. *Journal of Business Finance & Accounting*, 34(1–2), 111–138.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance*, 52, 737–783.
- Short, H., Keasey, K., Hull, A., & Wright, M. (1998). Corporate governance, accountability, and enterprise. *Corporate Governance: An International Review*, 6(3), 151–165.
- Short, H., Keasey, K., Wright, M., & Hull, A. (1999). Corporate governance: From accountability to enterprise. *Accounting and Business Research*, 29(4), 337–352.
- Short, J., Broberg, J., Coglisier, C. C., & Brigham, K. (2010). Construct validation using computer-aided text analysis (CATA). *Organizational Research Methods*, 13(2), 320–347.
- Singh, M., & Davidson, W. N. (2003). Agency costs, ownership structure and corporate governance mechanisms. *Journal of Banking & Finance*, 27(5), 793–816.
- Slater, S., & Olson, E. (1996). A value-based management system. *Business Horizons*, 39(5), 48–52.
- Spira, L. (2001). Enterprise and accountability: Striking a balance. *Management Decision*, 39(9), 739–748.
- Spira, L., & Bender, R. (2004). Compare and contrast: Perspectives on board committees. *Corporate Governance*, 12(4), 489–499.
- Starovic, D., Cooper, S., & Davis, M. (2004). *Maximising shareholder value: Achieving clarity in decision-making*. London: CIMA.
- Stewart, G. (1994). EVA[®]—Fact or fantasy. *Journal of Applied Corporate Finance*, 7(2), 71–84.
- Stewart, G. B. I. I. I. (1991). *The quest for value*. New York: Harper Business.
- Thornhill, S., & Amit, R. (2001). A dynamic perspective of internal fit in corporate venturing. *Journal of Business Venturing*, 16(1), 25–50.
- Tillema, S. (2005). Towards an integrated contingency framework for MAS sophistication: Case studies on the scope of accounting instruments in Dutch power and gas companies. *Management Accounting Research*, 16, 101–129.
- Ting, H. (2006). When does corporate governance add value? *The Business Review*, 5(2), 196–203.
- Tricker, B. (1997). What information do directors really need? *Corporate Governance: An International Review*, 5(3), 109–111.
- Van der Stede, W. A. (2000). The relationship between two consequences of budgetary controls budgetary slack creation and managerial short-term orientation. *Accounting, Organizations and Society*, 25(6), 609–622.
- Van der Stede, W. A. (2001). Measuring tight budgetary control. *Management Accounting Research*, 12(1), 119–137.
- Venkatraman, N. (1989). Strategic orientation of business enterprises: The construct, dimensionality, and measurement. *Management Science*, 35, 942–962.
- Vesber, K. (1990). *New venture strategies*. Englewood Cliffs, NJ: Prentice Hall.
- Young, S., & O'Byrne, S. (2001). *EVA and value-based management: A practical guide to implementation*. New York, NY: Mc Graw-Hill.
- Zahra, S. (1991). Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of Business Venturing*, 6(4), 259–285.
- Zahra, S. (1993a). Environment, corporate entrepreneurship and financial performance: A taxonomic approach. *Journal of Business Venturing*, 6(4), 259–285.
- Zahra, S. (1993b). New product innovation in established companies: Associations with industry and strategy variables. *Entrepreneurship Theory and Practice*, 18(2), 47–69.
- Zahra, S. (1995). Corporate entrepreneurship and financial performance: The case of management leveraged buyout. *Journal of Business Venturing*, 10, 225–247.

- Zahra, S. (1996). Governance, ownership, and corporate entrepreneurship: The moderating impact of industry technological opportunities. *Academy of Management Journal*, 39(6), 1713–1735.
- Zahra, S., & Covin, J. (1993). Business strategy, technology policy and firm performance. *Strategic Management Journal*, 14, 451–478.
- Zahra, S., Filatotchev, I., & Wright, M. (2009). How do threshold firms sustain corporate entrepreneurship? The role of boards and absorptive capacity. *Journal of Business Venturing*, 24(3), 248–260.
- Zahra, S., Neubaum, D., & Huse, M. (2000). Entrepreneurship in medium-size companies: Exploring the effects of ownership and governance systems. *Journal of Management*, 26, 947–976.
- Zimmerman, J. (1997). EVAs and divisional performance measurement: Capturing synergies and other issues. *Journal of Applied Corporate Finance*, 10(2), 98–109.

Author Biographies

Adel Elgharbawy is a lecturer at Brunel University-London. He has received his Ph.D. from Brunel Business School. He worked as assistant lecturer at the Faculty of Commerce, Alexandria University. His research interests include management accounting, performance measurement and management, corporate governance and entrepreneurship.

Magdy Abdel-Kader is Professor of Management Accounting at Anglia Ruskin University and the Editor-in-Chief of the International Journal of Management Accounting Research. He worked at universities of Bedfordshire, Brunel, Essex and Exeter. He received his Ph.D. from the University of the West of England, Bristol and his publications have appeared in journals such as Management Accounting Research, British Accounting Review, and Advances in Management Accounting. Magdy is the editor of Review of Management Accounting Research and the principal author of books on investment decision-making in advanced manufacturing technology and new product development teams and co-author of books on enterprise resource planning (ERP) implementation and management accounting change, non-financial performance measurement, and behavioural aspects of auditors' evidence evaluation. His main research interests include management accounting; performance measurement and management; risk management; capital investment decisions; corporate governance; and sustainability.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.