

## **Business ethics as a design factor for Management Control Systems**

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### **Abstract**

This paper argues that Management Control Systems (MCS) are dysfunctional when business ethics is not considered. The normative theories of business ethics, and particularly the social contract theory with its hypothetical justice agreement, provide guidance leading to responsible leadership as a design factor. The 2010 oil spill in the Gulf of Mexico as best case.

*Keywords: Management Control Systems Design; Business Ethics; Responsible Leadership;*

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## Business ethics as a design factor for Management Control Systems

### **Introduction**

This paper aims to motivate that business ethics should be included as a factor in the design of an MCS to assure that functioning MCS remains functional. For leaders to act responsibly implies an ethical qualification, which can be understood as an evaluation of the means to accomplish performance goals in the light of moral norms or ethical considerations (Yukl & Becker, 2006). In an era of information supported decisionmaking ethical considerations as a design factor has received increasing attention (Bose, 2012).

The normative theories of business ethics (Hasnas, 1998), namely, stockholder theory, stakeholder theory, and social contract theory, provide guidance. Stockholder and and shareholder theory state that executives have a fiduciary responsibility to maximize shareholder value and delivering intended results and maintaining the company's viability of the company's product and service (Bose, 2012). Social contract theory poses the question: "under what agreement should a corporation be allowed to operate in a society?". This poses a hypothetical agreement with the social welfare and justice. The social welfare is the corporation's obligation to improve the well-being of the members of the society in their pursuance of corporate profits. The expectation from the justice term of the hypothetical agreement is that corporate executives will operate in a way that "avoids fraud and deception ... shows respect for their workers as human beings, and ... avoids any practice that systematically worsens the situation of a given group in society ..." (Donaldson & Preston, 1995). This implies that corporate executives have to balance the responsibility to lead the organization in achieving organizational objectives while complying with the hypothetical agreement of justice being a responsible leader.

The main goal of responsible leadership is to contribute to the fulfillment of organizational performance goals as a “process of facilitating individual and collective efforts to accomplish shared objectives” (Yukl & Becker, 2006). Global leaders have on a fair, sustainable society an effect by influencing them negatively or positively (Yasir & Mohamad, 2016). The responsibilities of global leaders have expanded with more intangible factors that are limited included in an MCS.

The literature on MCS design has focused mainly on formalized factors (Davila, 2000; Davila et al., 2011; Langfield-Smith, 2006; Otley, 1999). The line of research in MCS literature has evolved to capture intangibles by including more complex indicators. An example is the balanced scorecard (Kaplan, Robert S; Norton, 1992) to produce greater alignment or congruence with organizational strategy (Kaplan & Norton, 2009). An MCS case study (Morsing & Oswald, 2009) using the Balanced Scorecard on the effects of sustainable leadership shows that just use of an MCS technique would lead to a fair organization culture. The literature show that MCS theory and practice are struggling with the expanding role of MCS in relation to a fair outcome. However, it does prove that MCS should considering public concerns with a pivotal role for leaders.

Guided by the normative social contract theory as part of the normative business ethics theory, the urgency of including business ethics as a MCS design factor is discussed with the case of the 2010 BP oil spill in the Gulf of Mexico (NationalCommission, 2011) when performance goals had precedence over ethical considerations. Using a normative ethical framework for a just design synthesized with a research framework for responsible leadership the case is discussed proving that business ethics should be included as a MCS design factor.

First, we discuss the function of an MCS and the link to leadership according to theorists. The third section presents the synthesis of the normative ethical framework and research framework for responsible leadership as a research direction. The third sections analyzes the BP Oil spill as a best case of a dysfunctional MCS proving the necessity of including business ethics as a design factor. Finally, we conclude with conclusions and suggestions for further research.

### **A Management Control System**

MCS are tools to implement strategies. Strategies differ between organizations, and controls should be tailored to the requirements of specific strategies (Adler, 2011). Different strategies require different task priorities, key success factors, and different skills, perspectives, and behaviors (Govindarajan & Fisher, 1990). An MCS provides a means of gathering and processing information to assist managers in planning, control, and performance evaluation throughout the organization (Marx et al., 2012). Use and design of MCS are crucial aspects for achieving goal congruence, but they are thought to be contingent to specific external situations (Malmi & Brown, 2008). MCS are designed to achieve the greatest possible goal congruence, where people pursue personal goals that conduce to the organizational goal (Chapman, 2005).

Thus, a continuing concern in the design of MCS should be whether the behavior induced by the system is the one called for by the strategy. Data gathered and information generated by any MCS component (①IT-based systems to measure performance, ②reward systems for employees and ③aligning management performances with organizational objectives (goal congruence)) serves two main purposes: decision-influencing and decision-facilitating (Abernethy, M.A., Guthrie, 1994).

Research on MCS has been extended with strategy (Bruining et al., 2002; Chapman, 2005; Crombie & Geekie, 2010; Gond et al., 2012; Langfield-smith, 1997) therefore explicitly with leadership. A Management control system (MCS) is functional when functioning according to its design, to motivate managers to ensure that organizational objectives are accomplished (Chenhall, 2003; Escofet, N.C., Rosanas, J. M, 2012; Otley, 1995). Dysfunctional here means inappropriate to the organization's objectives or the people belonging to the organization (Escofet, N.C., Rosanas, J. M, 2012). For this reason, it is worth examining responsible leadership as a design factor of MCS cause it is possible to use a functioning MCS to push people in the wrong direction producing a potential 'unfair' outcome. In that case a MCS may benefit a small minority by imposing ways of doing things and creating unfairness for the rest of the company and even beyond its intra-organizational boundaries.

### **Synthesized framework to frame ethical considerations when designing an MCS**

Research has shown how fair or unfair outcomes, procedures, and interactions using MCSs by leaders are perceived (Escofet, N.C., Rosanas, J. M, 2012). On the one hand, there is responsible leadership steering towards an outcome considering the use of control systems. On the other hand, an MCS design can be formally just or formally unjust, and the use of the MCS can be informally just or informally unjust.

In this section, the conceptual framework of "a just MCS design and use" by Escofet et al. (2012) is synthesized with the conceptual framework of "Outcomes of responsible leadership across levels of analysis" by Voegtlin et al. (2012). These paradigms combined create a framework to dynamically analyze the outcome of responsible leadership using the BP oil disaster as best case. First, both frameworks are explained.

### Escofets' framework of "a just MCS design and use"

Propositions about a 'just' MCS suggest a normative nature. Escofet has described a normative definition for each MCS: [1] a 'just' IT-based system to measure performance should set goals in a way that integrates individual goals; [2] a 'just' reward systems for employees establishes a minimum reward to be received by all participants, and must set a limit to pay inequalities. For managers, it should include some form of controllability criterion, meaning that managers should only be evaluated on elements over which they have some influence. For the organization as a whole it should distribute resources and responsibilities among sub-units and evaluate sub-units according to the real achievements of each sub-unit and the competencies of its staff, following rules of the game that are explicitly established ex-ante; and [3] a 'just' goal congruence for an MCS should include means of repairing injustices and should provide mechanisms for changing the system;

A just design of an MCS combined with just use of the MCS leads to what Escofet calls *maximum goal congruence*; an unjust design combined with just use, to *occasional goal congruence*; a just design combined with unjust use, to *perverse goal congruence*; and an unjust design combined with unjust use, to *minimum goal congruence*.

		MCS design	
		Formally just	Formally unjust
MCS use	Informally just	<i>Maximum goal congruence</i>	<i>Occasional goal congruence</i>
	Informally unjust	<i>Perverse goal congruence</i>	<i>Minimum goal congruence</i>

Table 1: Escofets' (2012) combinations of justice of the design and use of the MCS

**Voegtlin framework "a research agenda of responsible leadership."**

Research on responsible leadership (Voegtlin et al., 2012) relates leadership to important outcomes across three levels of analysis (Micro-level: personal interactions, Meso-level: shaping organizational Culture and Performance, and Macro-level: relations to external stakeholders). The macro-level outcome includes legitimacy, trustful stakeholder relations, and social capital and acts as a point of reference that encompasses the interaction for organizations with the broader society. This suggests that besides the internally focus use of a just MCS the outcome of an MCS should include the outcome via responsible leadership. Therefore leaders play a pivotal role in the fair outcome of an MCS in determining the moral quality of the outcome.

The concept of responsible leadership is that leadership is related to essential outcomes highlighting influences of leadership on organizational outcomes across levels of analysis.

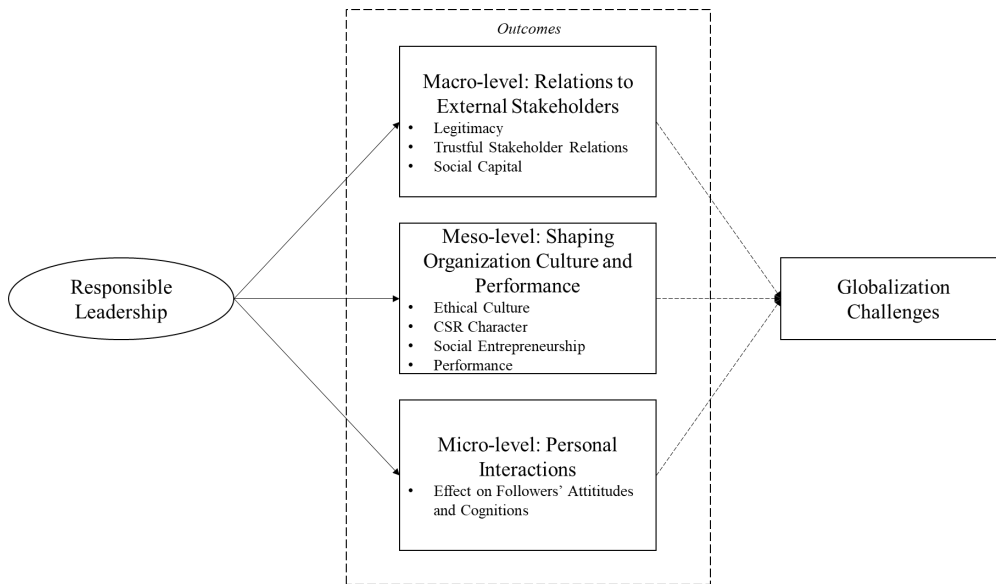


Figure 1: Outcomes of responsible leadership across levels of analysis

### Synthesize a conceptual framework to include responsible leadership in MCS design

The justification to synthesize a just MCS design with the outcome levels is supported by the literature. Abernethy et al. (1994) acknowledge that leadership style is "clearly to be an important correlated (but often omitted) variable given that MCS choices are the means by which top management communicate, empower and execute their vision.". More specifically, leaders rely on the decision-influencing and decision-facilitating roles of MCS information for employees' performance evaluation, motivation, and managerial decision making (Nguyen et al., 2017). They may provide important insights into the motivations behind an organization's choice of MCS design. The first synthesis includes MCS components as the means for leadership in figure 2.

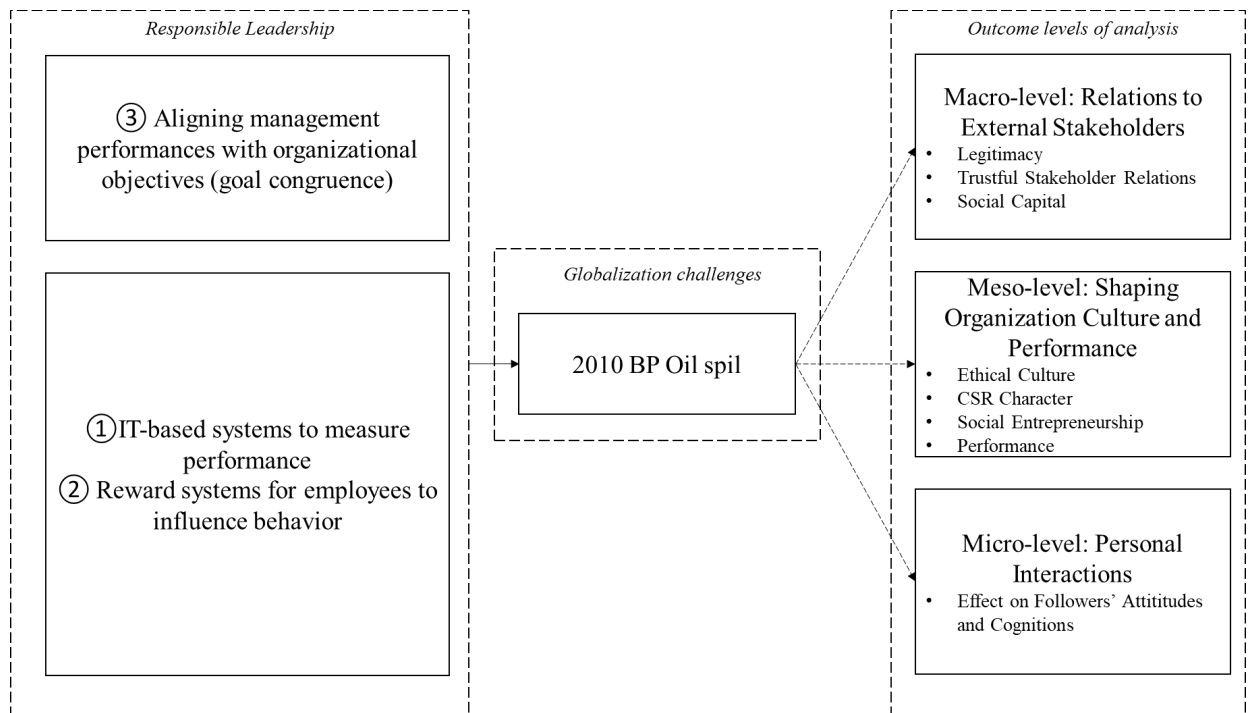


Figure 2: Synthesis of MCS components with the concept of responsible leadership across levels of analysis



### **The BP Oil spill case**

The analysis commences with a description of the BP Oil case using examples from the "report to the president" of the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling. The Deepwater Horizon was drilling the Macondo well under 5,000 feet of Gulf water, and then over 13,000 feet under the seafloor to the hydrocarbon reservoir below. The remarkable advances that have propelled the move to deepwater drilling merit comparison with exploring outer space. However, drilling in deepwater brings new risks, not yet wholly addressed by the reviews of where it is safe to drill, what could go wrong, and how to respond if something does go awry. The deepwater environment is cold, dark, distant, and under high pressures—and the oil and gas reservoirs, when found, exist at even higher pressures (thousands of pounds per square inch), compounding the risks if a well gets out of control. The Deepwater Horizon and Macondo Well vividly illustrated all of those genuine risks. When a failure happens at such depths, regaining control is a formidable engineering challenge—and the costs of failure catastrophically high. In the years before the Macondo blowout, neither industry nor government adequately addressed these risks. Investments in safety, containment, and response equipment and practices failed to keep pace with the rapid move into deepwater drilling. Absent major crises, and given the remarkable financial returns available from deepwater reserves, the business culture succumbed to a false sense of security. The Deepwater Horizon disaster exhibits the costs of a culture of complacency and lack of responsible leadership.

The leaders who were present at the origin of the BP Oil disaster had access to functioning MCS components that include systems, data, and information to make the decisions to produce a fair sustainable outcome in terms of just use of the MCS. Their decision to select a cheaper type of steel for drilling was driven by just financial performance management

considerations. However ethical concerns were present for the people working on the oil platform, the surrounding environment, and those living on nearby shores.

Analyzing the BP Oil Spil case as real case variables while synthesizing the model in Fig 2 with Escofets’(2012) combinations of justice of the design and use of the MCS is displayed in Fig.3.

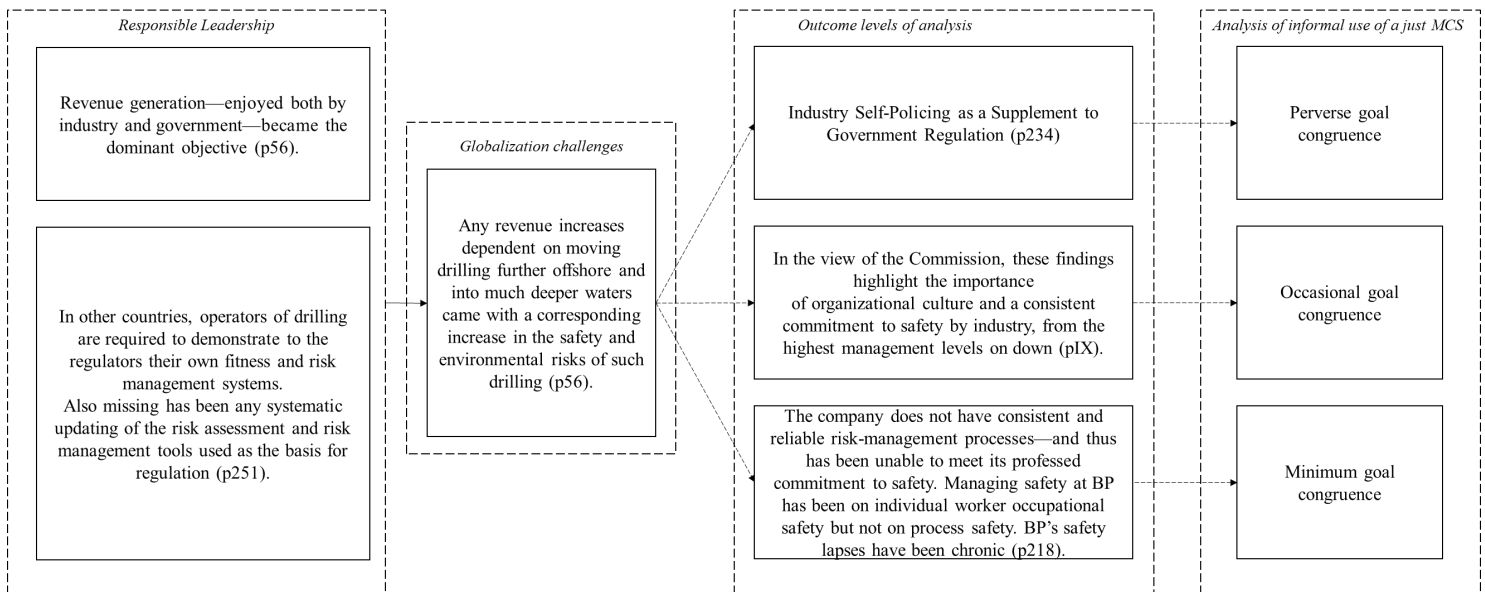


Figure 3: Analysis of 2010 BP Oil Spil case of responsible leadership across levels of analysis using a just MCS

**Macro-level outcome of analysis: Perverse goal congruence**

It is suggested in the case that the MCS design of BP was just. Obtaining a license to drill is not an easy feat. However, the system was used unjustly as revenue generation—enjoyed both by industry and government—became the dominant objective (NationalCommission, 2011, p. 56). Leadership demanded changes in the system because any revenue increases dependent on moving drilling further offshore and into much deeper waters came with a corresponding increase in the safety and environmental risks of such drilling.

***Meso-level outcome of analysis: Occasional goal congruence***

According to Escofet et al. (2012), this is a more common state, one in which many organizations find themselves. Leadership at BP was shaping organizational culture to foster ethical behavior, debatable whether it was the right one, emphasizing financial performance ignoring CSR responsibility that came along with further offshore deepwater drilling. Goal congruence at BP was occasional, and the MCS did not have a perfect just design as the emphasis was on financial performance fueling informal justice.

***Micro-level outcome of analysis: Minimum goal congruence***

When an MCS design is unjust, and the system is used unjustly, there will be a situation of minimal goals congruence. Perceptions of injustice have adverse organizational consequences as managing safety at BP has been on individual worker occupational safety but not on process safety. BP's safety lapses have been chronic (National Commission, 2011, p. 218). Those consequences ended up destroying risk and safety value at BP because behaviors came in place that ultimately damaged the organization's legitimacy and social capital, therefore trusting a broad spectrum of her stakeholders. It is argued that the motivations of BP leadership and its members became misaligned.

**Conclusions**

Though this article is guided by the normative theories of business ethics, using synthesized theoretical models with a best practice, it has shown that business ethics as a design factor is subjective. It involves leaders' making decisions and acting concerning outcomes and

procedures when the MCS is applied in a specific global context as such for BP. The BP case shows that justice requirements and responsible leadership should be included in the MCS design, and managers should use them proactively and consistently.

### **Suggestions for further research**

An effort is made to bring together literature on MCS design with business ethics enforced with responsible leadership in a single case study. The analysis of responsible leadership guided by the normative business ethics theory can be an avenue for research to conceptualize a conceptual framework that would further contribute to the existing literature.

The result of studies using the conceptualized framework would advance the findings of prior studies (Abernethy, M.A., Guthrie, 1994; Bouwens & Abernethy, 2000; Escofet, N.C., Rosanas, J. M, 2012) in relation to the research line of MCS design.

### **Limitations**

As with any research, there are limitations. There is limited theoretical work that deals with the prescriptive role of business ethics of any kind in MCS design and MCS use. At the same time, multiple theoretical works suggests including the prescriptive role of business ethics in MCS design. Caution is required in dealing with the suggested stereotyped outcomes in the design of MCS. This would require a longitudinal research approach to measure the long-term effect of business ethics in the design and use of an MCS. Further research is needed to consider the differing capacity of different aspects of business ethics to improve the design and use of MCSs.

## References

- Abernethy, M.A., Guthrie, C. H. (1994). *An empirical assessment of the “fit” between strategy and management information system design.*
- Adler, R. W. (2011). Performance management and organizational strategy: How to design systems that meet the needs of confrontation strategy firms. *British Accounting Review*, 43(4), 251–263. <https://doi.org/10.1016/j.bar.2011.08.004>
- Bose, U. (2012). An ethical framework in information systems decision making using normative theories of business ethics. *Ethics and Information Technology*, 14(1), 17–26. <https://doi.org/10.1007/s10676-011-9283-5>
- Bouwens, J., & Abernethy, M. A. (2000). The consequences of customization on management accounting system design. *Accounting, Organizations and Society*, 25(3), 221–241. [https://doi.org/10.1016/S0361-3682\(99\)00043-4](https://doi.org/10.1016/S0361-3682(99)00043-4)
- Bruining, H., Bonnet, M., & Wright, M. (2002). Management Control Systems and Strategy Change in Buyouts. *Journal of Economic Literature*, 37.
- Chapman, C. (2005). *Management control systems and the crafting of strategy: a practice-based view* (C. S. CHAPMAN (ed.)). Oxford University Press.
- Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28, 127–168. <https://doi.org/10.1063/1.5024417>
- Crombie, N. A., & Geekie, T. J. (2010). The Levers of Control in the Boardroom. *6th Asia Pacific Interdisciplinary Research in Accounting Conference (APIRA 2010)*, 11–13.
- Davila, T. (2000). An empirical study on the drivers of management control systems’ design in new product development. *Accounting, Organizations and Society*, 25(4–5), 383–409.

[https://doi.org/10.1016/S0361-3682\(99\)00034-3](https://doi.org/10.1016/S0361-3682(99)00034-3)

- Davila, T., Foster, G., & Li, M. (2011). Designing Management Control Systems in Product Development: Initial Choices and the Influence of Partners. *SSRN Electronic Journal*, 3(598). <https://doi.org/10.2139/ssrn.875307>
- Donaldson, T., & Preston, L. E. (1995). the Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *Academy of Management Review*, 20(1), 65–91. <https://doi.org/10.5465/amr.1995.9503271992>
- Escofet, N.C., Rosanas, J. M., . (2012). (2012). The just design and use of management control systems as requirements for goal congruence. *IESE Business School - University of Navarra*, 3.
- Gond, J. P., Grubnic, S., Herzig, C., & Moon, J. (2012). Configuring management control systems: Theorizing the integration of strategy and sustainability. *Management Accounting Research*, 23(3), 205–223. <https://doi.org/10.1016/j.mar.2012.06.003>
- Govindarajan, V., & Fisher, J. (1990). Strategy , Control Systems , and Resource Sharing : Effects on Business-Unit Performance Author ( s ): V . Govindarajan and Joseph Fisher Source : The Academy of Management Journal , Vol . 33 , No . 2 ( Jun . , 1990 ), pp . 259-285 Published by : Academy o. *The Academy of Management Journal*, 33(2), 259–285.
- Hasnas, J. (1998). The Normative Theories of Business Ethics : A Guide for the Perplexed. *Business Ethics Quarterly*, 8(1), 19–42.
- Kaplan, Robert S; Norton, D. P. (1992). The Balanced Scorecard - Measures That Drive Performance / Robert S. Kaplan, David P. Norton. Tt -. *Harvard Business Review*, 70(1), 71. <https://umei007-fall10.wikispaces.com/file/view/Kaplan%26Nortonbalanced+scorecard.pdf>
- Kaplan, R. S., & Norton, D. P. (2009). Putting the balanced scorecard to work. *The Economic*

- Impact of Knowledge*, 315–324. <https://doi.org/10.1016/b978-0-7506-7009-8.50023-9>
- Langfield-Smith, K. (2006). A Review of Quantitative Research in Management Control Systems and Strategy. *Handbooks of Management Accounting Research*, 2(2003), 753–783. [https://doi.org/10.1016/S1751-3243\(06\)02012-8](https://doi.org/10.1016/S1751-3243(06)02012-8)
- Langfield-smith, K. I. M. (1997). Management control systems and strategy - a critical review. *Science*, 15(368), 110–111.
- Malmi, T., & Brown, D. A. (2008). Management control systems as a package — Opportunities , challenges and research directions. *Management Accounting Research* 19, 19, 287–300. <https://doi.org/10.1016/j.mar.2008.09.003>
- Marx, F., Wortmann, F., & Mayer, J. H. (2012). A maturity model for management control systems: Five evolutionary steps to guide development. *Business and Information Systems Engineering*, 4(4), 193–207. <https://doi.org/10.1007/s12599-012-0220-x>
- Morsing, M., & Oswald, D. (2009). Sustainable leadership: Management control systems and organizational culture in Novo Nordisk A/S. *Corporate Governance*, 9(1), 83–99. <https://doi.org/10.1108/14720700910936083>
- National Commission. (2011). Deep Water – The Gulf Oil Disaster and the Future of Offshore Drilling. In *Underwater Technology* (Vol. 30, Issue 2). <https://doi.org/10.3723/ut.30.113>
- Nguyen, T. T., Mia, L., Winata, L., & Chong, V. K. (2017). Effect of transformational-leadership style and management control system on managerial performance. *Journal of Business Research*, 70, 202–213. <https://doi.org/10.1016/j.jbusres.2016.08.018>
- Otley, D. (1995). Research in Management Control: An Overview of its Development. *British Journal of Management*, 6(S31-S44 (December 1995)), 14.
- Otley, D. (1999). Performance management: A framework for management control systems

research. *Management Accounting Research*, 10(4), 363–382.

<https://doi.org/10.1006/mare.1999.0115>

Voegtlin, C., Patzer, M., & Scherer, A. G. (2012). Responsible Leadership in Global Business: A New Approach to Leadership and Its Multi-Level Outcomes. *Journal of Business Ethics*, 105(1), 1–16. <https://doi.org/10.1007/s10551-011-0952-4>

Yasir, M., & Mohamad, N. A. (2016). Ethics and morality: Comparing ethical leadership with servant, authentic and transformational leadership styles. *International Review of Management and Marketing*, 6(4), 310–316.

Yukl, G. A., & Becker, W. S. (2006). Effective Empowerment in Organizations. *Organization Management Journal*, 3(3), 210–231. <https://doi.org/10.1057/omj.2006.20>